GRUMMAN
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Grumman mourns Lew Evans, dead at 51

Grummanites were shocked and saddened last Monday morning when it was announced that Lew Evans had died the previous Sunday afternoon, July 9, of a heart attack.

Evans, who was Chairman of the Board and Chief Executive Officer of Grumman Aerospace Corporation and President of Grumman Corporation, died at his home on Tappan Town Lane, Brookville. He was 51 years old.

Lew came to Grumman in 1951 as an assistant general counsel, became a vice president nine years later, and was named a senior vice president in 1963. He rose to the presidency of Grumman Aircraft Engineering Corporation in 1966.

When the Corporation was restructured in 1969, he became President of both the parent Company and its Aerospace subsidiary. In February of 1971, he was elected Chairman of the Board and Chief Executive Officer of Grumman Aerospace Corporation, as well as Chairman of its Executive Committee.

He had served as a Director of Grumman Corporation since 1966, and also had served as a Director of all Grumman subsidiaries.

Evans had a direct hand in the Company's latest two major programs, the Lunar Module, part of the National Aeronautics and Space Administration's Apollo program, and the new Tomcat (F-14), designed as the air superiority aircraft for the U.S. Navy.

He played an active role, too, in Grumman's bid to win the NASA Space Shuttle contract.

It was during Evans' tenure that the Company branched out into new fields, such as Grumman Data Systems and Grumman Ecosystems.

Leader in industry

In 1969, he received the National Aeronautics and Space Administration's Distinguished Public Service Award for outstanding contributions as a key leader of the government-industry team that led to the success of the Apollo 9 mission and its first manned flight of the Grumman Lunar Module.

Evans was born August 2, 1920, while his parents were in Usankinko, Korea. In early life, he lived with his parents in Mexico and, later, California. He received a B.A. degree from the University of California in 1942, majoring in engineering and economics. He then joined the Army Air Corps; he became a first lieutenant, and was awarded the Distinguished Flying Cross and the Air Medal with five oak leaf clusters.

He entered Harvard Law School, earning his degree in 1947. He was admitted to the bar during the same year. From 1947 to 1951, he served as Assistant Counsel with the Bureau of Aeronautics, Department of the Navy, in Washington, D.C. He then joined Grumman.

Evans is survived by his widow, Georgene, and a son, Llewellyn Jr.

A special Plane News memorial issue to Lew Evans will be ready for distribution this week.

Navy signals 'go-ahead' on A-6 TRAM with $23 million award

The Navy has awarded Grumman a $23 million contract for the development of a further refinement to the A-6E Intruder weapons system. In announcing the new contract on June 30, Bill Trillo, A-6 Program director, said, "The addition of TRAM will enhance the capability of the A-6E Intruder. We're further improving what the Navy has called 'the best all-weather attack aircraft in the free world'."

This is a Research & Development contract extending over 31 months, Trillo explained.

"TRAM" stands for Target Recognition Attack Multisensor and the program is a direct outgrowth of the A-6C aircraft, which has already demonstrated that real-time imagery (as in TV) of a non-radar significant target (e.g., trees and wooden boats or other nonmetallic objects) can be achieved. This new system will be developed and tested on the A-6E aircraft—a modernized A-6A using solid-state avionics, Trillo explained.

The heart of TRAM is a Detection and Ranging Set (DRS) that basically consists of a display called FLIR (Forward Looking InfraRed) and a Laser/Rangefinder/Detector (LRD) developed by Hughes Aircraft. FLIR gives the bombardier/navigator (B/N) a display very similar to home-style black and white television. Target detection is accomplished by the aircraft radar set at relatively long ranges. As the target is approached, the B/N compares the dual displays of the radar image and the FLIR image. Once the target is fully recognizable in the FLIR display, he commences tracking, using the DRS (Detection and Ranging Set) system. As he tracks the target, the aircraft computer interprets the data and constantly calculates steerage command information for the pilot's display. The attack mode is selected and the bombing equation is worked out.

In addition to providing increased capability against non-significant (non-reflective) radar targets, the aircraft will have a terminal guidance system for the new laser guided weapons (LGW) that have been having wide press coverage in Vietnam lately, the so-called "smart bombs." This guidance system provides for a controlled trajectory after bomb release. "The concept of 'one target—one bomb' is fast becoming a reality," Trillo said.

Outfitted at Calverton

Tucked under the black radome on the nose of the A-6E, now being outfitted at Calverton, will be a "chin" pod containing the TRAM system components and extending about 10 inches into the air stream. This location will permit full hemisphere coverage below the aircraft, providing the maximum unrestricted field of view.

The pod location allows the pilot to perform post-release maneuvers without jeopardizing the B/N's ability to guide the bomb to the target, "thus ensuring an autonomous, or self-sufficient, laser-guided weapon capability," says Dan Collins, deputy director for the development side of the A-6 Program. He calls the TRAM system "one of the greatest steps forward in the technological advancement of precision air-to-ground weapon delivery systems."

Vern Kramer, who heads up the program management team for TRAM, has been deeply involved with optical sensors and laser guidance systems over the past several years. He points out that the A-6C Trails, Roads Interdiction Multisensor (TRIM—not to be confused with TRAM) aircraft has been able to integrate Low Light Level TV (LLLTV) and FLIR to produce a non-radar significant target detection and tracking sys-

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Getting together. **During her tour of Transpo '72, Mrs. U.S. Savings Bonds, Jacqueline Goreham of Denver, Colo., visited the Grumman exhibit to view corporate products, among them the Tracked Air Cushion Research Vehicle and this Gulfstream II model. Savings Bonds and the Gulfstream II make a good pair—they're both solid investments.**

NASA-Industry team studying satellite to trap solar energy

The feasibility of using massive satellites to beam down electrical energy for power needs on earth will be studied for the National Aeronautics and Space Administration under a $197,400 NASA contract. Grumman will be one of four industry teams that will be involved in this six-month contract, the others being the Spectrolab Heliotek Division of Textron Inc., the Equipment Development Lab of Raytheon Corporation, and Arthur D. Little, Inc., the prime contractor. Grumman's particular province will be the flight control dynamics: how to launch, fly, and orbit a satellite seven miles long and three miles across, weighing 20-50 million pounds.

Conversion station

Such a station would convert solar energy to electric power in space and then transmit the power via a microwave beam to earth for distribution and use. It would, says John Mockovciak, manager of Solar Energy Systems, generate five to 10 times the electrical energy generated by a new conventional type of electrical power plant. "Equal to five to 10 'Big Allises,'" added Paul Henton, Project engineer. "Base power for a large city."

Analytical studies

Under the NASA contract, work will focus on analytical studies in critical areas — for example, to determine the manageability and control of very large structures in space and to identify other key technology advances that would be required to make such a concept feasible and economically attractive. Another part of the work will assess the station's environmental, technical, and economic impact.

This is the first contract for a large solar power platform. It would be put into geosynchronous orbit and solar arrays would collect the sun's energy and convert it to electrical power. The arrays being considered are basically silicon cells, extremely thin, flexible, and imbedded in plastic.

The contract will be managed by NASA's Lewis Research Center in Cleveland.

Skylab launches new space effort following final Apollo flight in '72

The National Aeronautics and Space Administration has announced that three challenging earth orbital manned spaceflight programs are scheduled to follow the final Apollo moon landing mission in December.

Three Skylab missions planned for 1973 will log more than 9,000 manhours in space; the first American-Soviet manned space flight is planned for 1975; and manned earth-orbital test flights of the reusable Space Shuttle are to begin in 1978.

Skylab will be the first U.S. space station in orbit. The spacecraft and launch vehicles are elements of the Apollo program. They became surplus after several Apollo test fights in 1967 and 1968 proved that the equipment was qualified to carry out lunar landing missions. The largest segment is the workshop or space laboratory, the size of a six-room house. It is a third stage of a Saturn V launch vehicle made habitable for a crew of three men. Attached to the workshop will be an airlock, docking adapter, and a large solar telescope. These will be launched into earth orbit with the first two stages of the Saturn V rocket from Kennedy Space Center.

About one day later, three astronauts will be launched in an Apollo spacecraft by a smaller Saturn IB vehicle. They will maneuver the spacecraft to dock with the Skyab laboratory for missions ranging from 28 to 56 days.

The workshop will be outfitted with equipment to carry out more than 50 scientific, biomedical, and technical experiments in earth orbit. The solar telescope will provide man with his first opportunity to study the sun's activity outside of earth's atmosphere.

Extensive biomedical studies will be conducted to study the effects of long duration space flights on the human body and to test possible methods of preventing deconditioning of an astronaut's muscular, skeletal, and cardiovascular systems in the weightless environment.

Earth resources sensing systems aboard Skylab will survey crops, vegetation, geological formations, underground water and minerals, and global wind, sea, and weather conditions. Skylab technology and engineering experiments will investigate the possible use of space for the processing of materials and the testing of equipment which may enable man to maneuver and perform more effectively in space.

Launch of the unmanned workshop is planned for April 30, 1973. If all goes well, Astronauts Charles Conrad Jr., Dr. Joseph P. Kerwin (a medical doctor), and Paul J. Weitz will be launched. They will dock their Apollo spacecraft to the laboratory on May 1 and begin their four-week mission.

Late in July the second Skylab crew, Astronauts Alan L. Bean, Dr. Owen K. Garriott (an electrical engineer) and Jack R. Lousma will enter the Skylab laboratory for a visit of up to eight

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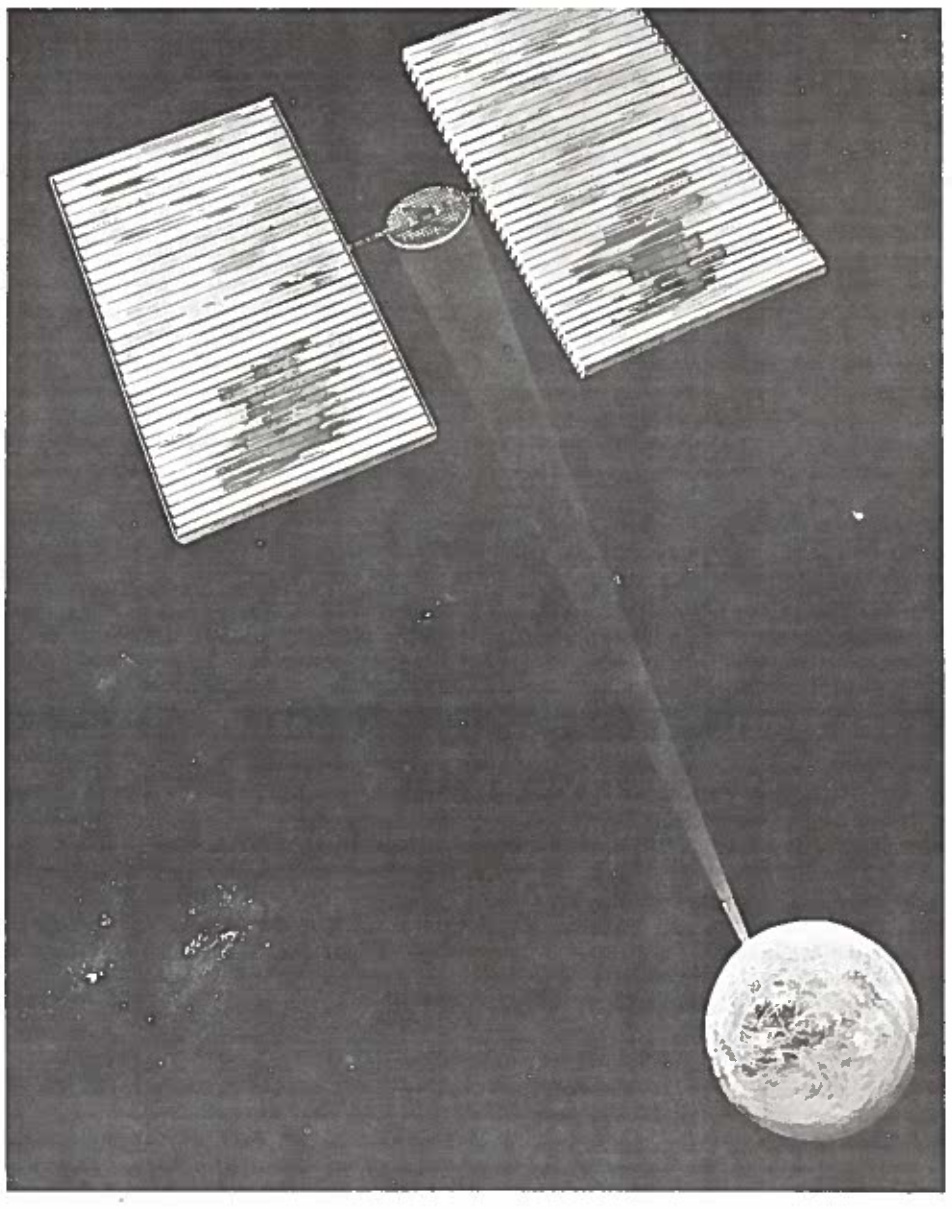
More on A-6 . . .

(Continued from page 1)

tem on board the A-6C aircraft. Recent modification of an A-6C replaced the LLLTV with the laser illuminating system. This "breadboard" modification demonstrated that a high resolution FLIR integrated with a laser ranging system would provide an attack capability against a broader spectrum of targets (power plants to sampans) with a high degree of accuracy during interdiction missions, day or night.



Power station. **Grumman is one of four industry teams with NASA contract to study feasibility of enormous satellite solar power station. Such a station would convert solar energy to electric power in space and then send the power via microwave beam to earth. Microwave antenna is seen here between two massive solar arrays. Energy is limitless, and free of pollution. (Art by Jim Rodriguez)**

He joins select A-6 group

The number of Navy pilots who have been "wedded" for a number of years to the Grumman Intruder is growing . . . and growing. But Lt. Cdr. Stu Allison of Attack Squadron 176 recently joined a still select group of A-6 pilots who have logged 2000 flight hours in the Intruder — and that called for a celebration of sorts.

When Commander Allison (C) and his bombardier/navigator Cdr. Dick Dunleavy, Executive Officer of VA-176, returned to the carrier Franklin D. Roosevelt in the eastern Mediterranean, the squadron skipper, Cdr. Sam Mikitarian (L), was waiting to offer his congratulations on the 2000-hour milestone. That's a lot of seat time!

Grumman Field Representative Bob Robinet, who's attached to VA-176, also reports that Lt. Cdr. Don Tarquin, a submariner attached to Commander Sixth Fleet Staff, became a "tailhooker." That occurred when Commander Tarquin made his first carrier landing in an Intruder piloted by Allison.

Bill Miller, F-14 test pilot, dies in accident at Patuxent River

Friday, June 30, about 2:15 p.m., Bill Miller, F-14 Project test pilot, died as the F-14 he was piloting plunged into the waters off Patuxent River, Md. His body was recovered July 6. Miller was flying solo at the time of the crash.

Miller was popular and highly respected, and his loss has saddened his many associates in the Company.

According to reports, Miller took off from the Naval Air Test Center, pointed Tomcat No. 10 south, turned east over Chesapeake Bay, and hit the water in what a Navy press release termed as a "shallow dive." There was no report from Miller indicating that he was in an emergency, according to the report from the test center at Patuxent River.

It had been Miller, along with test pilot Bob Smyth, who crashed at Calverton December 30, 1970, in F-14 No. 1. Both men ejected safely and were unhurt.

As was the case in the earlier crash, the Navy has convened a six-man accident board to investigate the circumstances surrounding the accident. In the meantime, Grumman will continue flight testing of the Tomcat.

Bill Miller
Dies in flight accident

Aided F-14 design

Miller came to Grumman as an engineering test pilot five years ago and during that time took part in flight testing the F-111B and, later, the F-14. He assisted engineering personnel in bringing about the final design of the Tomcat.

Miller attended the University of the South at Sewanee, Teen., and, in 1956, graduated from the U. S. Naval Academy. He became a Navy aviator a year later. He served as a flight instructor in the Naval Air Advanced Training Command and then went on to pilot F-3B and F-4B aircraft in carrier-based squadrons.

A graduate of the U. S. Naval Test Pilot School, Miller was a project test pilot in the Flight Test Division at the Naval Air Test Center for four years, and during that period flew on many projects.

He is survived by his widow, Charm, and three sons, Bryan, Stephen, and Kenneth.

Whidbey instructors welcome first EA-6B 'Prowler' trainer

Weather (would you believe a Wyoming snowstorm the last weekend in April?) delayed its arrival three days, but the canopy ejection seat maintenance trainer, first of three EA-6B maintenance trainers, went immediately into use at the Naval Maintenance Training School at Whidbey Island the first week in May. (Whidbey is the exclusive naval training base for the EA-6B Prowler.)

Joel Taft, EA-6B NAMT lead structural engineer, had accompanied the trainer to the West Coast and stayed right with it. "I was running the acceptance test on the systems display training board and the Navy instructor was standing on the other side, teaching his class of Navy technicians the components of the system," Taft said. "We didn't waste a minute.

"And then after seeing the training, other instructors began to ask for time to use the trainer.

"It was the actual No. 2 flight prototype; the prime structure of the trainer was made from Flight No. 2 EA-6B prototype. I had taken a red marker and said, 'Cut there,'—and they did," he said. Taft credited the Grumman Wood Shop, Static Test, and Electronics Repair Shop on its appearance and construction. Dan O'Neill is EA-6B Program manager and Bob Davison is Support Program manager.

The other two trainers due to go to Whidbey Island this year are a navigation systems maintenance trainer and an electronic countermeasures maintenance trainer.

VAQ-132, the first squadron to deploy with the Prowler, has a date with the Seventh Fleet off the Southeast Asian coast.

Space Fair at Mugu

Grummanites based in Southern California can look forward to a big weekend on October 21-23. On that Veterans' Day Weekend, Navy space fair officials are planning their 13th annual event that is expected to draw upwards of 150,000 for the three-day show. Last year nearly 200,000 people attended.

Center of the activity will be a 40-acre midway featuring a half-mile of exhibits covering all facets of aerospace programs in the United States today. Included in a static display will be a moon rock and many of the nation's newest and fastest aircraft.

Twice-a-day air shows will be headlined by the Navy's Blue Angels, a daredevil Army parachute team, and a number of the country's top civilian aerobatic pilots.

The space fair is sponsored by the Naval commands and units assigned to the Pacific Missile Range Headquarters, Pt. Mugu, and the U.S. Naval Construction Battalion Center at Pt. Hkueneme. Funds raised at the fair go to the Navy Relief Society.

Bischoff, KSC team honored by NASA for Apollo 16 work

The National Aeronautics and Space Administration held a special Honor Awards Ceremony June 22 at Marshall Space Flight Center to honor individuals and groups who contributed significantly to the success of the Apollo 16 mission. Grumman was one of three contractors at Kennedy Space Center to receive the NASA Public Service Group Achievement Award. And Will Bischoff, LM Program Engineering manager, was honored with the NASA Public Service Award.

Dr. James C. Fletcher, NASA Administrator, presented the awards.

Will Bischoff
Saluted by NASA

Veteran on LM

Bischoff was honored for his contributions to the support of Apollo 16 (he was LM Engineering manager), and for his general support of the Apollo mission. He has been with Grumman 24 years and has been associated with the LM for 10. Before that he worked on Echo, W2F, S2F, UF, F9F, F11F—and a few others. He came from the Spartan Junior College of Aeronautical Engineering and got his degree under the Grumman Tuition Reimbursement Program in 1958 from New York University. The Bischoffs live in Huntington. They have two girls and a boy. Bill Henry of KSC represented 114 men who comprise Grumman's Lunar Module Hypergolics Loading Team. "This award reflects the con-

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service milestones

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Peter T. Giannott, Detail Parts (2)
Christian F. Keller, B/P Whses. (21)
Frank P. Lichtneger, Mfg. Test Plts. (27)

30

Stanley Zabielski, Prototype (1)
Louis A. Nemeth, Elect. Fab (1)
Oscar W. Rockefeller, Mfg. Test Plts. (1)
Anthony Mineo, Press (2)
August J. Schiavetta, Alodine (2)
Arthur McQuillan, GSE Mech (2)
Harry A. Gavers, Plt. Stores (2)
John J. Cook Jr., Jig Details (2)
Stanley M. Mazur, ESO (2)
Edward A. Hertford, Convent. Mach (3)
Anthony T. Messina, Plt. Stores (3)
John Zabielski, Final Assem. Struct. (4)
Douglas Buchanan, Drafting (4)
Edward L. Wismann, Supp. Equip. Prod. (5)
Charles W. Cornelius Jr., Space Mgmt. & Staff (5)
Joseph A. Keller, Pwr. Plt. (6)
Salvatore F. Salanitri, Insp.-Mech. (6)
Benjamin F. Conklin, Flt. Dev. (7)
Westen E. Seidler, Maint. (12)
Charles S. Krick, Trans. Ofc. (20)
William J. Braun, Assem. Meth. & Plng. (25)
Peter J. Keenan, Plt. 5, Plt. 33 Mgmt. & Staff (33)
William Ziegler, Maint. (33)
Allan F. La Mere, P/S Supp. Equip. Serv. (34)
Raymond A. Ferrari, Stds. (35)
Frank M. Candito, Mfg. Test Plts. Mgmt. & Staff (36)
Clifford J. Hinton, B/P Whses. (37)
Charles V. Beckers, QC (88)

R. Russo | F. R. Grath | J. J. Dalessio

V. L. Stavish | J. Peterson | R. G. Beneville

25

Pasquale Russo, Sub-Assem. (1)
Francis R. Grath, Meth. Eng. (1)
John J. Dalessio, F-14 Mfg. (1)
Vincent L. Stavish, GSE Mech. (2)
John Peterson, Prop. Test (2)
Regis G. Beneville, Honeycomb Prefit (3)
Edwin M. Polese, Mach. Oper. (3)
Warren A. Klein, Final Assem. Struct. (4)
Felix Latinski, Static Test (5)
Walter M. Wermter, Drop Test & Elements (5)
Josef J. Hubert, Tech. Ops. Mgmt. & Staff (5)
Edwin B. Goral, Contracts A/C (5)
Alfred C. Plate, Preflight Finals (6)
John N. Leone, Trans-Oper. (20)
Theodore A. Kerpez, P/S Verif. & Prod. Supp. (25)
Elizabeth Finley, Contracts Manned Space (25)
Paul T. Bosch, Sub-Assem. Major (27)
Leonard C. Ward, Rqmts. Plng. (30)
Victor Di Mattia, Elect. Fab. (33)
Arthur F. Drake, QC Supplier (35)
William R. Berge Jr., Hull Assem. (36)
Arthur Gerdes Jr., Purch. Mgmt. & Staff (87)
Richard L. Oldenburg, P/S Sys. Tech. Mgmt. (87)
Lincoln F. Pearsall, Lab. Mgmt. & Tech. (92)

20

Frank De Rosa, Hyd. (1)
Henry Geiser, Hyd. (1)
James H. Bieler, Hyd. (1)
Michael Silipo Jr., Final Assem. (1)
Salvatore M. Buonindontro, Final Assem. Struct. (1)
Edwin P. Cayea, F-14 Mfg. (1)
John Sposito, Struct. Ana. (1)
Gerald Windus, Rel. & Ctl. (1)
William J. Kearney, Press (2)
James G. Russo, Steel Pts. Assem. (2)
Donald H. Bartow, Meth. Eng. (2)
Fred J. Calfior, Plng. (2)
John C. Archibald, Form Block (2)
James P. McEnaney, Food Serv. (2)
Vincent J. Smith, Router & Shear (3)
Frank Psotta, Engrav. (3)
David E. Hahn, Chem Mill (3)
Charles J. Burger, Honeycomb (3)
Howard J. Winkelman, Wing Sub-Assem. (3)
Peter J. Grudzinski, Wing Final Assem. (3)
John C. Cordts, Wing Final Assem. (3)
Anthony Ficarrotto, Fuse. Assem. (3)
Robert W. Muller, Ctr. Sect. Final (3)
Samuel J. Jarvis Jr., Honeycomb (3)
Ronald P. Nielsen, Honeycomb (3)
Ralph A. Panetta, Prod. Ctl. (3)
Robert M. Morell, Crit. Mat'l. Ctl. (3)
William E. Russell, Facil. Maint. (3)
John Lapinski, Maint. Waste Dispos. (3)
Anthony Ferraioli, Insp-Mech. (3)
Ronald W. Cerreta, Insp-Mech. (3)
Matthew Azoto, Insp-Mech. (3)
Rudolph L. Broghhausen, Final Assem. Struct. (4)
Richard I. Van Allen, Flt. Crews (4)
Louis J. Gasser Jr., Insp-Elect. (4)
Herman Voigt, Static Test (5).
Paul A. Scudieri, Mech. Struct. & Proto (5)
Elwood L. Larson, Elect. Repair (5)
George B. Ruetemann, Elect. Repair (5)
Eugene A. Rossi, Mech. Elect. (5)
Esther C. Faulkner, Prod. Ops. Mgmt. (5)
Clarice E. Neumann, Food Serv. (5)
Harold L. Schoemmell, Instr. A/C Test (6)
James T. Scanlon Jr., Ind. Eng. (6)
Charles A. Reinhartsen, Maint. (6)
Charles J. Cafaro, Maint. (6)
Eugene Bried, Maint. (6)
Lawrence J. Keenan, Preflight Finals (7)
Philip F. Ragozzino, Proj. Eng. (7)
Charles G. Kennington, Insp.-Mech. (7)
Henry H. Von Glahn, Final Avion. (8)
Thorer Christianson, Maint (12)
Cornelius L. Cleary, Meas. Std. Lab. (12)
William B. Weaver, Prog. Mgmt. (15)
Bernard W. Tichy, Prog. Mgmt. E2 (15)
Frank Higgins, B/P Whses. (17)
Ludwig J. Kotula, Trans. - Oper. (20)
William J. Mason, Ctl. Recv. (24)
Peter E. Black, Rec.-Insp. (24)
Henry S. Giersberg, Info. Rec. & Serv. (25)
Angelina Giarratano, Prog. Mgmt. Space (25)
Samuel Votta Jr., Fbgl. (27)
Harward J. Frank, Major Assem. (27)
Peter Callegari Jr., Ctr. Sect. (27)
John Kuczkuda, Prod. Ctl. (27)
Anthony M. Prezioso, Repair Ctl. (30)
George P. Turney, Maint. Admin. (30)
Carl F. Wander, Elect. Fab (33)
Zelig Witkin, Ctl. & Mech. (35)
Warren C. Trott, Adv. Civil Sys. (35)
Anthony Munno, Surf. & Assem. (36)
Albert Pennetti, Mech. Struct & Proto. (36)
Edward Liencicki, Final Assem. (36)
Mary A. Rodekop, Facil. Maint. (40)
Francis M. McMahon, QC (55)
John Manzutto, QC (55)
Raymond W. Kelton, Field Base Admin. (80)
Anthony S. Taibi, KSC QC (83)
Antonio Di Masi, KSC Mfg. Shops (83)
Gilbert R. Anderson, KSC Mfg. Shops (83)
Donald A. Walden, KSC Mfg. Shops (83)
Patrick H. Sullivan, GSFC (84)
Donald B. Small, Flt. Test (88)

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E. M. Polese | W. A. Klein | F. Latinski | W. M. Wermter | J. J. Hubert | E. B. Goral | A. C. Plate | J. N. Leone | T. A. Kerpez

Headin' back. Charlie Tsukamoto, shown enjoying a quip by Nick Scobbo, head of Field Service, was at Bethpage a couple of weeks ago for a program review and to report on squadron operations in Japan. (Photo by Fred Annette)

Saga of No. 155650

Now here's drama in capsule form.

From Grumman Service Representative Bob Searle comes this account of men reacting to emergencies, of an A-6A that didn't quite make it. . . .

Searle's no-frills report, filed from the USS Coral Sea, CVA-43, to Nick Scobbo, head of Grumman Field Service, goes like this:

"On May 29, 1972, at 3:30 p.m., A-6A 155650 was abandoned over the Gulf of Tonkin; the aircrew ejected and was rescued and returend to CVA-43.

"Prior to reaching the assigned target, the aircraft was hit three separate times with bursts of AA fire. The right wing was hit first; AA fragments entered the cockpit from underneath and exited through the canopy. The bombardier/navigator (B/N) was hit with debris from his console. A third burst rocked the aircraft violently; the pilot noted holes in the wing. The aircrew agreed to continue the mission as the aircraft responded well and no serious injuries had occurred.

"Ordnance was released on a target in NVN. At this time the combined hydraulic system failed and the backup system light illuminated. Additionally an accompanying aircraft observed and reported fire in the right wing of the damaged aircraft. The aircrew again agreed to continue and bombed a second target.

"Following this the fire in the right-wing, wing-fold area, had penetrated the wing upper surface and was visible to the aircrew (this approximately two minutes subsequent to AA hits in that area). The aircraft was headed toward an area designated for search and rescue (SAR) over the Gulf of Tonkin off the NVN coast.

"Upon arrival at the SAR area, crew members observed fragments of wing leaving the aircraft. The burning area was now approximately six inches wide and extended from the leading edge to near the trailing edge. Controls had become sluggish. The aircrew ejected with the aircraft in a straight and level attitude at 6,000 feet altitude. The canopy was jettisoned prior to ejection, the pilot waiting until the B/N had cleared the aircraft.

"Both crew members landed safely in the water and were picked up by a Navy 'Big Mother' HC-7 helicopter. A crewman from the helo entered the water to assist in the pickup, this a standard procedure.

"Rescue was accomplished without further incident. The aircraft was returned to CVA-43 within the hour, being heartily received by squadron members and others. . . . "

Lt. Cdr. Philip Schuyler was the pilot, and Marine Capt. Louis J. Ferracane, the B/N.

John and his flying machine

When August comes on strong this year, picture John Roth, assistant manager of Plant 4, flying his six-foot radio-controlled Volksplane against the toughest competition in 23 countries. The meet will take place in Toulouse, France, August 2 through 6. Roth and two other Americans will represent the United States as a consequence of winning the meet for scale model aircraft nationally in Chicago last year. Roth hopes to bring home a medal.

Travel, challenge of Field Service at top of his 'most wanted' list

About seven years ago, when he came to Grumman to work on the Lunar Module, Charlie Tsukamoto could hardly have foreseen how his world would change. After all, he was in his element: the world of space. And since he was a graduate electrical engineer and had five years' experinece with the Lockheed Missile Division, it seemed natural enough for him to be working on the vehicle that would someday land men on the moon.

Before Armstrong and Aldrin touched down on the moon four years later, however, Charlie Tsukamoto's base of operations had shifted from Bethpage to a village more than 10,000 miles away, and his professional concern was not with spacecraft but with aircraft.

But that's getting ahead of the story.

Charlie came east to join Grumman at Bethpage in June of 1965, but he didn't stay very long. Soon he was on his way again, this time to the NASA Apollo propulsion test site at White Sands, N.M., where he and other Grumman engineers and technicians tested rocket engines for the lunar lander. In 1968, with LM test work beginning to phase out at White Sands, Tsukamoto headed back to Bethpage for reassignment. Naturally, he thought, it would be on another phase of the Lunar Module.

Changing life style

He was mistaken. Tsukamoto was recruited for a career in Field Service—a decision that he has never regretted, but a decision, certainly, that has changed his life. After a couple of months of intensive schooling at Calverton on the A-6 Intruder's weapons systems, Charlie headed out again; this time, though, he didn't stop traveling until he reached Chu Lai in South Vietnam. It was there, in April 1969, that he joined VMA-533, a Marine A-6 attack squadron, as a Grumman Field Service representative.

Now based at Iwakuni, Japan, with VMA-533, Tsukamoto returned to the West Coast last month on family affairs, and, since he hadn't been back in Bethpage for more than three years, he flew to New York to meet with Nick Scobbo, director of Field Service, for a general updating on the Intruder and to give his own report on squadron operations.

While at Bethpage, he visited Plant 5 one rainy day (most of them in June were, it seems) to renew acquaintance with some former co-workers. His stopover at Plane News was brief and, at first, somewhat strained. Charlie doesn't like publicity. But after some prodding, his childhood and his travels as a Field Service rep began to take shape.

Grew up on farm

Charlie grew up on the West Coast, and like hundreds and hundreds of other youngsters in the early '40s, he worked the fields on his parents' farm. Being Japanese-American, he remembers the early days of World War II more vividly than any of his 12-year-old classmates at the time; the fear and distrust and alienation of former neighbors are not easily forgotten. Most of all, perhaps, Charlie remembers planting and harvesting crops with his brothers and sisters; it was backbreaking work.

After a Navy tour of duty in the Korean war—he had a chance to visit Japan then, too—he returned to study at Seattle University, earned a degree in electrical negineering, and started on his way.

In the 15 or so years since he last visited Japan, Tsukamoto has detected a greater western influence in that country. And yet, he says, there are many things that seem untouched by this instrusion of another culture. The usually clear definition between the roles of men and women, for instance. And their attitude toward work, for another. "There seems to be a greater loyalty toward the employer, there," says Charlie. "Many in industry wear uniforms, group morning exercise is common, and people seldom change jobs. There is 'zero' unemployment.

Off-hours tourist

"According to U.S. standards," he notes, "some jobs in Japan would be considered 'menial.' But they seem to feel, and I agree, that if a job is necessary, useful, and productive, it is an honorable one. I've worked on a farm and that was hard, manual labor. I kind of resent the term 'menial'."

Although his assignment as a Field Service rep keeps him pretty busy—one of his most important tasks is to train squadron maintenance men in the A-6 systems—Tsukamoto still finds time to see Japan in his off hours, and while visiting its historical and scenic spots, brush up on his own Japanese, as well.

It must have been embarrassing for Charlie to have been practically illiterate in his parents' mother tongue, but his vocabulary was rather limited, he admits, when he arrived in Japan three years ago. He now speaks with fluency although he still has difficulty reading the language.

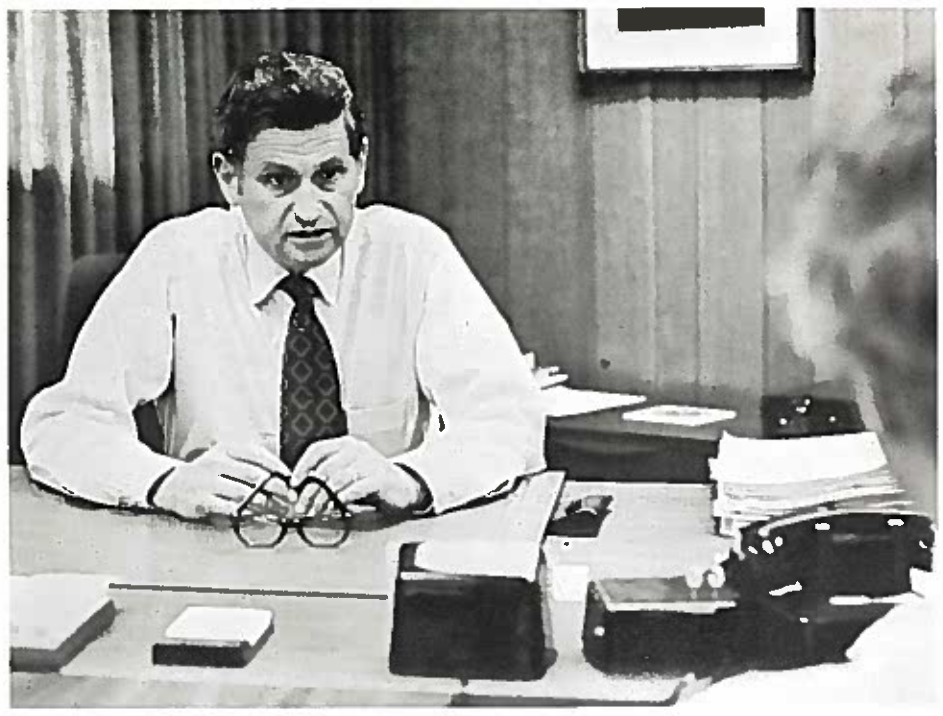
High praise for A-6

Charlie is unmarried, but the other Grumman people at the Marine air station at Iwakuni have their families with them. One of the surprising things about the Field Service reps' children, says Tsukamoto, is that they soon learn to speak Japanese with far greater fluency, and more precise inflection, than do their parents. Many of the tots attend pre-school classes with their Japanese counterparts, and for older youngsters, there is an American school on the base.

Charlie, who's high on the A-6—"best tactical aircraft the U.S. has"—and loves to travel—"I'll go anywhere"—thinks his assignment is a great way to see the world. He lists Vietnam, Japan, the Philippines, Okinawa, Thailand on his travels, and is looking forward to more excursions. He feels it's also an opportunity for him to meet many people, work on his own, and play a vital, responsible role in Company operations where it counts—in the field with the customer.

Charlie, then, is high on Field Service. At Bethpage, they're high on Charlie, too.

'At Grumman, design excellence is the hallmark of our heritage . . .'



Viewing the future. Vice President George Skurla took a look at the future for engineers in the aerospace industry recently. His outlook: promising; his suggestions: increased attention to cost effectiveness and customers' needs. (Photos by Harry Prodromides)

There are times when Vice President George Skurla must view his task as being somewhat like that of a symphony conductor: he needn't be expert in all disciplines in his Product Engineering orchestra, but he had better know who is. And once players are assembled, his most important challenge is to orchestrate their efforts so that they not only "play" well individually, but their combined effort is harmonious, too.

When he was director of Operations at KSC, all of Skurla's waking hours were focused on the Lunar Module. Since he returned to Bethpage about two years ago, the 48-year-old director of Product Engineering has a wide range of other concerns to fill his days, among them, the Navy's new F-14 fighter and the NASA Space Shuttle. As he sees it, because of the potential of these programs, "cost effectiveness" is high on his list of priority items.

And there's good reason for that. Skurla expects to see a significant turnaround in the Aerospace industry and a bottoming-out of anti-technology sentiment over the next couple of years, resulting mainly from the wind-down in the Vietnam war. Dollars that had been poured into war expendables will be directed toward other goals, he feels, with research and development, Space Shuttle transportation, short takeoff and landing (STOL) aircraft, mass transportation, and the updating of military hardware as the areas of increased government spending.

During the past decade, says Skurla, Grumman demonstrated its premier technical capability in the development of the A-6 Series, EA-6B, E-2 Series, Gulfstream II, OAO, Lunar Module, and now the F-14.

'Bullish' on aerospace

"I'm bullish on aerospace, and, in particular, on Grumman's future in the '70s and '80s," he said. "But for us to capitalize on this potential, we have to be ready. At Grumman, design excellence is the hallmark of our heritage, but in this day and age, we've got to keep reminding ourselves that design excellence, by itself, is not enough.

"We've got to think about 'producibility' and 'maintainability.' In other words, how easily can our designs be manufactured, and how much is it going to cost to produce and operate them. We must be able to produce our designs at competitive costs."

Terming aerospace as the "cutting edge" of our country's economic growth, Skurla credits its "multi-disciplined capability" with doing more toward improving the standard of our living than any other industry.

"Just for a starter, the space program has provided us with weather satellites that can track severe weather disturbances. Advanced warning of such storms as hurricane Camille has already saved thousands of lives," he points out. "There are other breakthroughs—spearheaded by aerospace technology—in such areas as medical research and patient care, mass transportation, modular building construction, home appliances . . . the list goes on and on.

"And remember, too, when we view the Olympics live from Munich this summer, that TV picture is being beamed our way by a communications satellite."

Key to future

So staying abreast of technological advancements is critical to a company such as Grumman, says Skurla, "but the real key to the future is how well we manage and orchestrate this technology."

Though there seems to be some evidence of an economic turnaround in aerospace in the next couple of years, that isn't the case just yet. Diminishing contracts with NASA and the Department of Defense have caused severe corporate and personal dislocations in the past four years, and Product Engineering hasn't escaped the cutback.

Faced with reducing engineering support for a 37,000-person organization to one of 22,000, Skurla and his managers have been forced to consolidate—in some cases by pruning what had become superfluous technical and service activities—to avoid rising operating costs, and do that without compromising the Company's ability to stay ahead in the industry. Although it was a traumatic period for everyone, he admits, Product Engineering is now leaner, and more flexible, and ready to take on greater challenges—such as the Space Shuttle—in the years ahead.

He pointed to a number of changes to support his point. From the recent consolidation there emerged a new "directorate," Development Test Engineering, designed to pull together the various ground test functions and integrate them with engineering test and program requirements.

Another key move in strengthening the department and its 3,500 men and women was establishment of Program Engineering Management, headed by Warren Allen. "When you consider that Product Engineering is the core of all our vehicle and systems engineering design efforts and development testing, you might well imagine how important such a function can be.

"We initially provide engineers from various disciplines to help support Advanced Systems activities (as do Flight Acceptance and Product Support for flight test and ground-support portions of a proposal). When Grumman wins a contract to design, develop, build, test, and finally produce new hardware, we must provide the necessary talent to implement this work."

And the scope of that task is extensive. Within Product Engineering are four technical directorates: Vehicle Technology, headed by Elio (Cappy) Caprioglio; Systems Technology, under Gene Bonan; Development Test, directed by Jack Snyder; and Production Engineering, under Vice President Jim Zusi.

"Take Cappy's area, for example. Within Vehicle Technology alone are: Flight Sciences, which includes aerodynamics, aerotest, thermodynamics, and propulsion; Structural Sciences, which includes structural analysis, loads and dynamics, and structural mechanics; and Vehicle Design, made up of structural systems, mechanical systems, and power plant and environment."

Engineers from each of the disciplines from "home" departments in Product Engineering, Skurla points out, are assigned to work for engineering managers on various corporate programs. Although these teams are usually kept intact to build up program engineering experience and continuity, in certain cases, like the Space Shuttle, talent to stock such a huge project is drawn not only from the "home" department but from all other programs as well.

"So we must tie in the requirements of the various corporate programs to help engineering managers meet their tasks, yet make sure that a balance is maintained so that any shift will provide both the 'new' and the 'old' program with the necessary engineering support. Program Engineering Management also provides engineering managers with a strong tie-back to the functional department, the fountainhead of all Grumman engineering," Skurla noted. "Through this tie-back, we're trying to assure the continuity of the engineering philosophy developed by Roy Grumman, and expanded upon by Bill Schwendler, Dick Hutton, and Grant Hedrick."

Building future team

The true test of the '70s and '80s may well be how successful Skurla and his directors are in combining youth and experience, and how successful they are in building a strong future "first team" that will carry over into the next decade.

To assure that transition, says Skurla, "We've created—but not as yet filled—a position of Chief Engineer who will, in effect, 'sit on top' of our four technical directorates. And sometime in the future we hope to bring together from the various sections of Product Engineering the top scientific and engineering minds—call it our 'brain trust'—to form a Science and Technology directorate.

"We've not going to stop there, either. We're developing an entirely new career path at Grumman for engineers who are not inclined, through choice or disposition, to be managers. Now there's an opportunity for a person who doesn't want to be a project engineer or section chief, who wants to stay in the more technical phase of the business, to move up the technical ladder and earn a well-respected and well-paying position.

"It will now be possible for a man or

woman who is outstanding in a specialty to move up to several new positions we've established, namely: technical specialist on a group level; principal engineer on a section level; and technical advisor on a management level. These stepping stones, we feel, will enable a younger engineer to see a career path in engineering that could lead eventually to a chief scientist spot at some discipline in the Science and Technology directorate."

Broaden visibility

Besides offering more career visibility, Skurla and his engineering directors are also encouraging younger engineers to seek broadened design visibility, too. "To do a complete job, an engineer can't feel he's finished when he puts his design on paper. He should follow it from the conceptual stage all the way through the cycle — manufacturing planning, tooling, production, even procurement— to get a good feel of how his design will impact the world in terms of cost and 'producibility.' Then he can go back to his drawing board, improve his design if necessary, and see it through to maturity before going on to something else."

Twenty years ago, before engineering and manufacturing facilities became so dispersed at Grumman, engineers were just a few minutes away from the shop floor and the hardware they were giving birth to. And manufacturing people were often found leaning over the drawing boards with engineers. It was a closely knit arrangement.

It isn't as easy any more. But Senior Vice President Corky Meyer and Skurla are working together to try to revive that sort of interchange to give engineers the opportunity to be more involved operationally.

The "why" is explained by Skurla: "Engineering designs have a dramatic impact on the rest of the Company. If the design is poor, the competition can be lost; if the design does win and it's not 'producible,' there could be trouble for manufacturing and procurement in living within estimated program costs.

"Some people think engineers like to play in 'sandboxes'," says Skurla. "In a way, that's true. Part of an engineer's life is to live in these so-called sandboxes, **but these sand boxes have to be kept well under control.** They're 'known' sandboxes, and they're consciously accepted to permit us to grow technically and maintain our technical expertise. Look at the record: Product Engineering did show more than $16 million in cost savings last year, the most of any Corporate Operating Department. That's pretty good, and this year we hope to do as well."

And what of the younger engineer, What advice does Skurla have for him? "Broaden your technical base. If you're an aerodynamics engineer, for instance, start learning more about propulsion, thermodynamics, flight controls, and so on. That way you'll have a better understanding of design trade-offs.

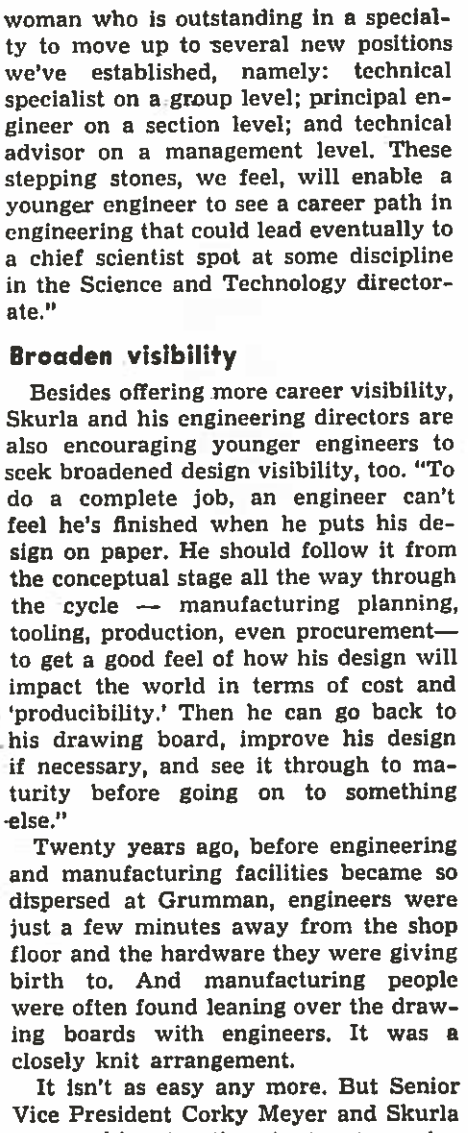
"Once he becomes a generalist, so to speak, he can work anywhere. And should he get assigned to Preliminary Design, where you have to be concerned with the entire aircraft package—wings, tail, flight controls, weapons, etc.—he'll soon discover how much he understands the total picture.

'Think in user's terms'

"An engineer must also be flexible enough to think in the user's terms: he must be concerned not only with creating something that works, he must design something the customer wants, can afford to buy, and can subsequently afford to maintain, too.

"So wrapping it up, if he can broaden his engineering knowledge, have a good feel for the production and operational phases of the business, and be flexible enough to adapt to the customer's needs, he'll not only become more valuable to the Company, he'll also improve his own chances for salary advances and more interesting and challenging assignments."

And what does George Skurla look forward to? "First, we want to make sure that we provide Grumman with the very best engineering team in the business. And then, I'm looking forward toward the day—and it may not be too long off, either—when we can launch a spaceplane from one of our runways, have it go into orbit, and land again at Grumman. Getting to ride in a machine like that would be the ultimate!"



Director of Product Engineering, George Skurla, sees new career path for engineers offering greater incentive to men and women who wish to concentrate solely on technical phase of industry.

Summer schedule . . .

The next issue of Plane News will be distributed on Monday, July 31, and will include a four-page supplement containing story and photos of the Grumman Family Picnic.

Then we go on vacation! We'll skip the first issue in August and be back with you again on Friday, August 25. During the hiatus, to make sure you don't miss us too much, you'll get news of Grumman through weekly News Board bulletins.

Skylab, joint space mission to follow up Apollo flight

(Continued from page 2)

weeks. The third crew, Gerald P. Carr, Dr. Edward G. Gibson (a physicist), and William R. Pogue, will carry out the last Skylab mission of eight weeks beginning late in October.

Space officials of the United States and the Soviet Union, who have signed an agreement to carry out a joint manned space mission, are planning a space rendezvous between American and Soviet spacecraft, probably in 1975.

A tentative flight plan is for the Apollo spacecraft to be launched from the Kennedy Space Center, Fla. A few days later the Soyuz would be launched from the Soviet Union. The Apollo craft, outfitted with a compatible docking hatch and airlock will maneuver and link up with the Soyuz. They would remain docked for about two days. While docked Americans will enter the Soyuz craft and cosmonauts will visit the Apollo spacecraft.

First flight in '76

The reusable Space Shuttle is to be developed over the next six years. Test flights are to begin in 1976, manned earth orbital test flights in 1978, and the complete Space Shuttle vehicle is to be operational before 1980.

The Shuttle will consist of a manned reusable Orbiter which will look like a delta-winged airplane about the size of a DC-9 jetliner. At launch it will be mounted "piggy back" to a large expendable propellant tank and two recoverable and reusable solid propellant rockets. The solid rocket motors and three orbiter engines will be ignited simultaneously on the launch pad. A few minutes after launch, the rockets will separate and be recovered from the ocean to be refurbished and reused.

The Orbiter with its crew will continue into space. When the desired orbit is achieved, the Orbiter's propellant tank will be jettisoned into the ocean. When its space mission is completed, the Orbiter will return to earth and land like an airplane. It will be designed to carry out at least 100 and possibly as many as 500 missions in space.

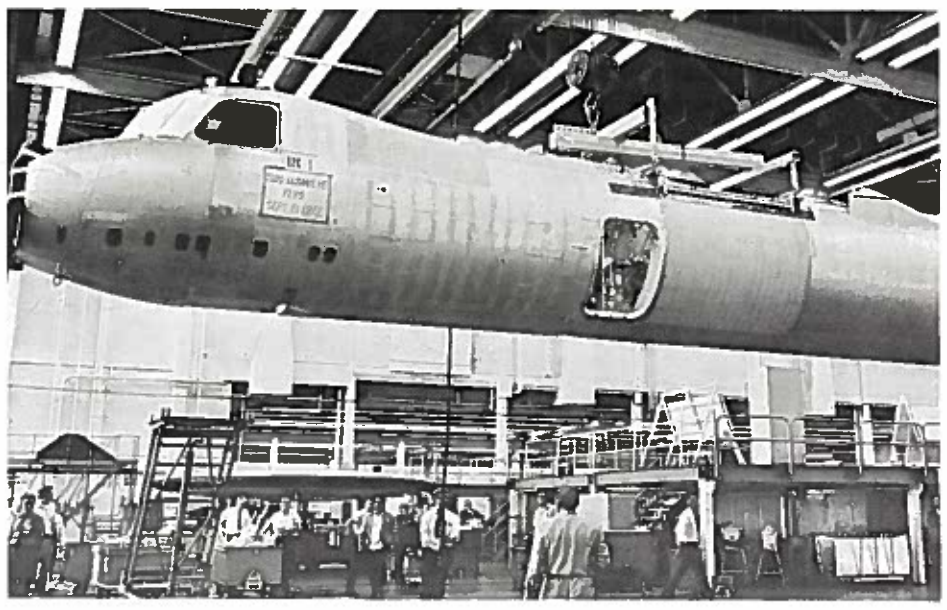
The Space Shuttle Orbiter will deploy in earth orbit virtually all scientific and applications satellites and replace most of the expendable launch vehicles currently used. Its cargo bay will be about 18 meters (60 feet) long, 4.5 meters (15 feet) in diameter and carry payloads weighing up to 29,500 kilograms (65,000 pounds). Satellites deployed from the Shuttle will be tested and checked out in space before being left unattended. Malfunctioning satellites in orbit can be repaired in space from the Shuttle, or, if necessary, returned to Earth for repair and reuse.

Tomcat active, east and west

On the east coast at Calverton and on the west coast at Point Mugu NPEs (Navy Preliminary Evaluations) are in progress.

The NPE at Point Mugu began July 6 and is to run until about July 21. A Navy team headed by Cdr. F. Schluntz is making flight tests of Tomcat No. 5's avionics system, and the plan is to put in two six-day weeks of test flying. Later, beginning July 24, Tomcat No. 9—which is bailed to Hughes—is to demonstrate its fire control system. All modes of the AWG-9 will be tested.

Cdr. George White of the Naval Air Test Center at Patuxent River is in charge of the flight test team that will fly this NPE 2. The objectives of the tests are largely to check Tomcat's maneuvering envelope, its low-speed envelope, and its performance points—with various flight weapon configurations using the Phoenix, Sparrow, and Sidewinder missiles, drop tanks, and the M 61 gun. Tomcats 2 and 8 are involved in the NPE, which is scheduled for two weeks and will end July 21.



E-2C arrives. First E-2C fuselage, built in Plant 36, Garden City, was welcomed in Plant 6, Calverton, in May, for final assembly with the other major airframe sections. First production rotodome can be seen in low center. Initial flight is planned for September, a month ahead of schedule. (Dick Sander photo)

NASA honors for LM team

(Continued from page 3)

tinuing excellence in performance of all members of our team," said Chuck Kroupa, KSC Base manager for Grumman. "These men work with a highly sensitive fuel in close, tight quarters. They've contributed to making each Apollo mission a success." McDonnell Douglas and Boeing were the other two teams to be honored with a Group Achievement Award.

Set 25-year luncheon

All you 25-year Grummanites, get out your calendar and mark down Tuesday, December 19. That's the date of the annual luncheon get-together for oldtimers at Grumman scheduled for the Huntington Town House. As usual, past quarter-century members are invited, but the real "honorees" will be those men and women who attained silver anniversary rank during 1972.

Ice Capade tix

The Ice Capades are coming to Nassau Coliseum August 25 through September 3, and Employee Services are offering discount tickets, on sale starting August 1: $7 tickets for $5.50, children, $3.50; $6 seats for $4.50, children, $3.

The Apollo 16 crew, John Young, Ken Mattingly, and Charlie Duke received the NASA Distinguished Service Medal.

'Dedicated efforts'

In his address at Huntsville, Ala., Dr. Fletcher said, "We are assembled here today to honor those whose dedicated and exceptional efforts contributed significantly to the success of the Apollo 16 mission, this nation's 26th venture of man into space and the fifth successful journey of men to the moon. . . .

"Both in the achievements on and around the moon, Apollo 16 gets very high marks. Its success reflects well not only upon the Apollo 16 crew but upon the many men and women who have worked and contributed to this mission. While we are honoring today a select few, I want to express my appreciation to all who are part of the NASA team. For each has shared in extending man's reach to the moon, and by so doing, has broadened our awareness of the human potential for achievement."

Public Service Awards like Bischoff's were presented in 1969 to Nick Sinder, Hal Wexler, and Don Moyer for their contributions to the Orbiting Astronomical Observatory Program.

NASA honor. Bill Henry (L) was chosen to receive NASA Public Service group award from Dr. James Fletcher, NASA Administrator, at June 22 ceremony, Marshall Space Flight Center. Grumman's Lunar Module Hypergolics Loading Team, comprising 114 men, was honored 'for contributing significantly to the success of the Apollo 16 mission.'

service milestones

15

(Continued from page 4)

Chester F. Repko, Sub-Assem. Major (1)
John W. Stecker, Final Assem. (1)
Joseph V. Consavage, Elec. Fab. (1)
Vito S. Palombella, Chem. Eng. (1)
Rosemary Caleca, Prod. Eng. Staff (1)
Edward E. Hawrey Jr., Conf. Data Mgmt. (1)
Chester W. Senig Jr., GSE Mech. (2)
Edward G. Kanas, Dispatch. WIP (2)
Robert J. Falkowski, Dispatch. WIP (2)
George A. Brittain Jr., Forecast. & Load. (2)
John Parrotta, Facil. Maint. (2)
Dorothy J. Geyer, Food Serv. (2)
Richard G. Detke, Convent. Mach. (3)
Franz A. Winnes, Convent. Mach. (3)
Edward J. Powelski, Parts Paint (3)
Peter Koland Jr., Parts Paint (3)
George W. Hempel, Chem. Mill (3)
Nelson R. Bolton Jr., Wing Sub-Assem. (3)
Lewis Messina, Wing Final Assem. (3)
Kenneth Garrett, Plt. Stores (3)
Robert E. Boisits, Instr. A/C Test (5)
Richard P. Schlegelmilch, Wood Shop (5)
Guy A. Styles, Present. Serv. (5)
Marshall J. Corbett, Prod. Dev. Staff (5)
John M. Raad, OPS Anal. (5)
John E. Cunniff, Adv. A/C Sys. (5)
Roderick Rezek, Resource Mgmt. & Staff (5)
Alex Mazik, Hyd. (6)
Charles D. Richardson, Hyd. (6)
Walter J. Kowalsick, Pwr. Plt. (6)
Harold A. Briggs, Pwr. Plt. (6)
Frank Cipriani, Ordnance (6)
Dana F. Davis, Final Assem. (6)
Edmour J. Gagnon Jr., Preflight Finals (6)
Edward A. Gross, Flt. Avion. (6)
Donald G. Nelson, Supp. Equip. Prod. (6)
Allen J. Johnson Jr., Mfg. Test Plts. (6)
Peter King, Mach. Oper. (6)
Vernon R. Cox, Prod. Ctl. (6)
Erling M. Holm, Plt. Stores (6)
Joseph J. Brandt, Govt. Mat'l Ctl. (6)
Ralph Stuyvesant, Facil. Maint. (6)
Raymond W. Johnson, Train. & Dev. (6)
William J. Majuk, Struct. Des. (6)
Ignazio Baiamonte, Preflight Finals (7)
Roy A. Henninge, Elec. Prod. (7)
Robert A. Brooks, Airport Oper. (7)
Stephen Bruno, Airport Oper. (7)
Oddvar G. Skadberg, Struct. Sciences (7)
Joseph E. Stapleton, Plastic/Plaster Tool. (11)
Ilmars A. Hofmanis, P/S RF & Video Eng. (15)
Bernard Shatz, Prog. Mgmt. Space (25)
George J. Carey, Plexiglass (27)
Edward F. Milko, Prod. Ctl. (27)
Mansfield Hunt Jr., Crit. Mat'l. Ctl. (30)
Louis J. Agiesta Jr., Rqmts. Plng. (30)
Alice G. Fallot, P/S Secty. Serv. (30)
Annette Montaperto, Corp. Audit & Proc. (30)
John F. Purdy, Wire Prep (33)
Gordon W. Cargill, P/S Elec. Eng. (33)
Clarence F. Crosby Jr., PPO - EA6 (34)
Anthony C. Menna, P/S Bus. Mgmt. (34)
Kenneth Hubbard, P/S Pric. (34)
Clifford E. Wright, Drafting (34)
Eva A. Leonard, Medical (35)
Arnold R. Johnson, Fluid Mech. (35)
William B. Ericson, Aerophysics (35)
Rudolf Bernstein, Specs. (35)
John E. Minett, Sub-Assem. (36)
Edward C. Quinn, Ind. Engg. (36)
John F. Mummery, Finance (55)
Walter J. Turnquist, Serv. & Supp. (55)
Matthew W. Gallagher, Flt. Accept. (74)
Leroy W. Duryea, Flt. Oper. (75)
Charles Arater, KSC QC (83)
Joseph J. Smitelli, KSC Mfg. Shops (83)
Billy D. Cotts, Product. (88)
Dale W. Richardson, QC Supplier (89)
Harry P. Standinger, QC Supplier (89)
William T. Malloy, ECO Systems Mgmt. (4)
Dorothy M. Spencer, GDS (DSC)
George B. Patterson Jr., GDS (DSC)

E. Finley | P. T. Bosch | L. C. Ward | V. Di Mattia | A. F. Drake | W. R. Berge Jr. | A. Gerdes Jr. | R. L. Oldenburg | L. F. Pearsall

Shadows spin Wiffles, 20-5, as Grillo paces strong attack

Al Grillo collected five hits for a perfect record at the plate, Bill Sikorsky whacked a homer and two singles, and four others had three hits each—and the score showed it. The Shadows demolished the Wiffles by 20-5 in the Thursday after-hours invitational loop recently with Grillo leading the hit parade. John Wallace, Mike Gabriel (who doubled as the twirler), Art Frasca, and Bill Lyons picked up three safeties apiece, the longest being Frasca's triple.

Fall from paradise

The Hiballs saw life from the other side of the curtain recently. A couple of weeks ago, Bill Pallack flipped a no-hitter; last week the Hiballs were dumped 17-3 by the Digits. Paul Bavitz finished with four hits, one a tape-measure shot to left centerfield, and team mates Gene Lowe and Charlie Bosch added three hits apiece. . . . In another Wednesday after-hours league game, the Tomcats scratched their way past the Black Diamonds, 5-3, with the help of four straight walks. Ira Samberg poled a homer, Frank Quarto and John Mahoney contributed a total of five hits, and Quarto also handled seven chances flawlessly at shortstop.

Near perfect, then . . .

Jim Dimitry twirled a perfect game for five innings in the Tuesday American after-hours division, allowed his first hit in the sixth, and in the seventh the roof caved in as the Supporters scored five runs. But during all that suspense, Dimitry's own team, Simulation, was ringing the gong for a total of 16 runs on 21 hits. Head bell ringer was Ed Gabriel, who had three hits including a double and round tripper, and Frank Prisco and Dimitry, who each collected three hits. The win gave Simulation a perfect record of 6-0 in the loop. . . . Tom Maurici's run-producing double proved the difference in the Mohawks' 7-6 squeaker over the Druids. Ed Montanez added a round tripper earlier. . . . Cleveland Jones whacked another big bopper, this one a solo shot in the fifth inning, as the Jets clobbered the Condors, 11-6. Brian Scheu had two hits—that didn't help his over. 500 average any—and Dom Pagnozzi, Ted Wess, Ken Soldwedel, and Bob Diemer also had two hits each.

Dom Kump smacked four hits, one a triple, for the Mets in a Tuesday night National league game but it didn't mean a thing. Made it close all right, but when the final score was in, the Woodpeckers kept right on pecking their way toward a perfect season with a 13-11 victory. The Woodpeckers now sport a 6-0 mark in the loop. Pete Viteritti's homer and two doubles, Rob Ogilvie's double, and three hits apiece by Joe Vosefski and Bill Dargis did the damage to the Mets. . . . At Wyandanch, Joe Fusaro and Bruce Driver had two hits each to spur the Soul Brothers Plus to a 12-3 win over the Pickups.

Cats in Owl rout

The Tomcats raced to an eight-run bulge in their first time at bat, added three more in the second and third innings, and finished their Nite Owl contest with Plant 4 on the strong side of a 19-4 count. Bill Worth, Jim Litterello, John Walden, and Lloyd Bigby featured the victory with three hits apiece. . . . Dan Meder and Dan Pierce socked two hits apiece, one a triple by Pierce, as the Machine Shop stopped the Rustlers, 6-3, in another Nite Owl contest. Don Crews had two hits for the Rustlers.

High kickers

Do you know that the world's most popular competitive sport (says Joe Campisi) is soccer? Even worse, that there's a shortage of players at Grumman? And further, that there's a somewhat desperate need for a coach?

'Tis true, so an SOS is in order: those who have played the stamina-breaking game, and any who think they may get a boot out of it, telephone Scotty Mayors on Ext. 2400 or 84444.

Grumman has fielded soccer teams for 21 years in the 25-year-old Long Island League; but Campisi says the Company squads have not run away with laurels, largely because of lack of manpower. "There are two Grumman teams," Campisi explains, "one in the Premier division, another in the Reserve division. Each is to field an 18-man team. We need at least a dozen new people to fill out the teams."

Practice sessions begin this month on the big field just north of the Grumman Garage (which is next to Plant 15). Plans are for three exhibition matches in August, perhaps one in early September; league competition gets under way in the third week of September. For particulars on when the practice sessions will be held, call Scotty.

Busy calendar for GAA

The Grumman Athletic Association has announced a busy calendar for August, starting with a free bowling clinic on Tuesday, August 8. The clinic, scheduled for August 8, 9, 15, and 16 at Syosset Lanes, will be conducted by accredited instructors, according to Herb Mahoney of GAA. Syosset Lanes will offer the free use of bowling shoes to those who don't have their own. The instruction will last from 5 - 7 p.m. Please call GAA, Ext. 2133 or 2269, to register if you plan to attend the clinic.

A mixed doubles tennis tourney is also on tap, with Friday, August 18, the deadline for entries. Both partners must be employees of the Company. If you don't have a partner, enroll anyway; GAA will try to match you up with another single if possible. Entrants will have to pay court fees in the preliminary matches, but GAA will pay the fees for semi-final and final matches and also supply tennis balls for all matches.

Tourney play is scheduled to begin the week of August 28. For further information, call Chet Baumgartner, Ext. 2133 or 2269.

With rain cancelling out the June mixed Pinehurst, and the second one of the season scheduled for tomorrow, Wednesday, July 19, Mike Cherry of GAA is now accepting reservations for the final mixed golf outing of the season. That's on the books for Wednesday, August 23. Call early, says Mike, 'cause Mixed Pinehursts are popular. Fees: $5 per person ($4 for the greens fee at Bethpage—it went up earlier this month—and $1 for kickers' prizes).

Tee team wins, and loses, too

Jim Alverson and Tony Cisco led the Grumman varsity golf team to an 8-0 victory over Photocircuits recently to run the squad's record in the L.I. Industrial circuit to 4-1. Alverson and Cisco both carded 49—three over par—for the 12 holes played, with Jim scoring birdies on the 385-yard par four 13th hole and the 420-yard par four 14th. Tony also dropped a birdie on the 14th.

Roy LaRosa and Jim Gambino both finished with 51 for the match. Gambino's card showed two birds, at the 375-yard par four third hole and at the 410-yard 11th hole, with LaRosa also scoring a birdie-three at the 11th.

Earlier, the varsity had downed Republic, 7-1, and lost to LILCO, 4½-3½. Gray led the Grumman scoring against Republic, scoring 49, two-over-par for the 12 holes in the Industrial match. Alverson registered 52, Jim Gambino, 56, and Tony Cisco, 58.

Against LILCO, Alverson scored 45 for 11 holes, three-over-par, and his partner Bob Holsten registered 48, while Gray and Cisco signed in with 50 and 51, respectively, for 12 holes.

Zarod links standout

In the Bearcat loop, Al Zarod birdied the first hole on the Green course at Bethpage and finished with 39 for nine holes. Carmine Lagnese scored a birdie-3 on the eighth to close with 41. John DeLessio and Tom Schindler lead the team chase with 95 points, followed by Dick Moulton and Warren Pottenberg, 90, and Al Zarod and Frank Leone, 82.

The next week, Zarod closed with 41 for nine, Dick Moulton had 42, and Carmine Lagnese, 43.

Jets win tourney

In a tournament marked by rain and forfeits, the Jets of the Thursday after-hours invitational league won the annual GAA slow-pitch softball tournament for the second straight time on Sunday, July 9.

Sorry about that . . .

It's embarrassing. Just about everybody knows that Plant 56 is located in Glen Arm, Maryland. The Grumman people there produce many of the major machined parts on a number of Corporate programs. So why did we blow it a couple of weeks ago when we reported the results of a shad fishing contest from Glen Arm? We said Plant 56 was in Sterling, Virginia; everybody knows that Plant 58 is situated in Sterling.

Bilogan top pinspiller

Nick Bilogan cashed in 234-580 and Jack Juppe fired 543 at Syosset Lanes recently to head the scoring in the Rainbow Mixed pin league. Lee Newcombe led the women's contingent with scores of 465 and 484 in the last two sessions.

Other highlights included Hank Abrami's 222-527 and 537, Al Massucci's 210, Gladys Curcio's 471, and Lil DeGaidano's 451.

Sterling effort. Al Schuckle, director of Procurement Inventory, recently presented Project Sterling group citation to members of Requirements Planning for their efforts in Mini-SACE program. At the presentation were: (standing) Max Ross, Schuckle, Carl Lubin, Marius Russo, and (sitting) Al Williams, Mary McCarthy, and John Ferguson.

Wanted

ENG.: Mod. airplane, ignition type, for ant. eng. collect., new or used. MA 6-2825.

ROOMMATE: Male, share furn. apt. in Westbury, w/2 Grummanites, sun deck, TV, 2 bdrm., liv. rm., kit, closet space, rn. Grumman, $20/wk. Ed Fischer, Ext. 3351.

APT.: Furn., 3½ rm., w/util., nr. Bethpage, $200/mo. Iris Falcone, Ext. 7201.

APT.: 3½ rm., Aug. occup. PY 8-9261.

APT.: Or home to share w/fem. WE 5-7770.

APT.: Nr. stores, widow w/fix. income, $75/mo. 643-3062.

MAGS.: Bk. issues of Corvette News, early '60s pref. JU 5-8992.

AFGHAN HOUND: Pref. for adopt., any color. ED 4-7027.

APT.: Lindenhurst thru Bay Shore vic., 3 or 3½ rm., work. couple, Sept. or Oct. occup., $160/mo. 587-2775.

SPACE HEAT.: New or used, gas, approx. 7 to 10,000 BTUs, Coleman 2 burner camp stove. PY 6-5160, after 6 p.m.

Car Pool

BELLEROSE: Or Glen Oaks, Queens, Plt. 1 or 4, 7:30-4 p.m. 479-0508.

PATCHOGUE: Bayport, Bluepoint, Sayville vic. to Calverton. 289-1661.

For Adoption

PUPPY: Fem. Wiemaraner mix, 9 wk., gd. w/child. 822-2191.

COCKER SPANIEL: Mix, 9 mo., nds. bkyd., all shots. Helen Hickman, Ext. 84156.

PUPPIES: 4, mix., 5 wk. 585-5292.

Ride Wanted

UNIONDALE: To Plt. 15. Janice Nesta, Ext. 87160.

REGO PK.: Forest Hills area to 34 complex, 8-4:30 p.m., for 1 wk. L. Magill, Ext. 9325.

For Rent

ROOM: Bethpage, lrg., pvt. ent., ref., gent. only, $28/wk. GE 3-1944.

STUDIO APT.: Huntington, furn., wlk. to bch. 549-1256.

APT.: Farmingdale, pvt. house, 3½ rm., pvt. ent., Aug. occup., util. xtra. CH 9-5794, after 4 p.m.

For Sale

FURN.: Wal. bdrm. set, triple dress./mirror, chest, 2 nite tbls., lamps, queen sz. hdbd.; Medit. blue/grn. couch, 8 ft.; children's bdrm. set, dbl. dress./mirror, chest, twin hdbds., Ital. Prov. fruitwood, best offer. Victor Chianese, Ext. 1746.

GAS RANGE: 36 in. Caloric, 4 burner, oven, stor. comp., clock, timer, lgt., nds. thermostat, $25. WE 5-2821.

TYPEWRITER: Port., carry. case. $30. GE 3-7706.

HOUSE: Northport, 4 bdrm. cape, 2 bath, all elec. kit., cov. patio, cath. ceil., 15 ft. brick firepl., $36,200. 757-2585.

FURN.: Din. rm. tbl., 4 chrs., china closet, $175; sma. round formica tbl., leaf & 4 chrs., nd. recov., $15. AN 5-3891.

HOUSE: Farmingdale, 3 bdrm. split, 1 panel, 1½ bath, formal din. rm., eat-in-kit., panel. rec. rm., fin. bsmt., att. gar., lndry., w-w, in grnd. gunite pool, 70x100, $41,500. CH 9-6817.

MOTORCYCLE: '70 Victor spec., BSA 441. 2,000 mi., $650; '59 MGA, comp. restored, new tp., ext. exh., 4 Michelin tires, $800. BA 3-2870.

PORT. ORGAN: Acetone, 5 stops, full vibrato, $200. PE 1-4207, after 6 p.m.

POOL HEAT.: Laar's 15-20 gal. cap. gas fired, 3 yr., 5 yr. guar., best offer o'$100, incl. approx. 15 ft. of 1½ in copper pipe for hookup to filt. 665-4008.

STA. WAG.: '65 Ambassador, auto., pwr. steer., new bks., shocks, & bat., wide ovals, snows w/rims, ask. $600. 473-6786.

FORD: '71 Pinto, deluxe, 4-pd., cust. yel., sell or trade, $1,500. 888-8794, bet. 4:30-6 p.m.

FREEZER: 15 cu. ft. upright, $35. Frank Zapanskey, Ext. 3434.

DRESS. TBL.: Kidney-shaped, girl's, w/mirror tp. & bench, $20. 598-1525.

For Sale

CORVETTE: '69, 350, 350 hp, 4-spd., all gauges, PDB, cust. paint, grn. & gold., L-60s on Mickey Tompson on 10 in. Crag rear, 6 in. Crag on front. MY 4-1991.

CHEVROLET: '70 Kingswood, 9 pass., fact. air cond., pwr. steer., disc bks., & wind., tilt whl., auto. dr. locks, dual tailgate, lug. rack, posi, V-8 c.i., rear defl., R&H, full carpet, w/w, orig. owner, $2,995. 665-0447.

CHEVROLET: '66 SS Bel-Air, 8 cyl., 2-dr., bkt. seats, ask. $750. 289-3750.

OLDSMOBILE: '61, 2-dr. hdtp., xtra rims, reblt. eng., 394 c.i., 4-bbl., 335 hp, $50. 273-4657.

AUDI: '72, AM/FM, low mi., radials, $2,800. 728-0922.

HUTCH: Pine fin. maple, spool trim, 42 in. wide, 1 yr., $150. GE 3-5658.

For Sale

SPORTSCRAFT: '71, 20 ft., fbgl. cab. cruiser, 65 hp elec. start. Merc. outbd., slps. 3, trlr., xtras, used under 4 hrs., $3,800. 281-2065.

OUTBD. MOTOR: '62, 25 hp w/tank, $125. 277-0840.

SEA SKIFF: 19 ft., 95 hp inbd., Navy tp. & full canv., fully equip. 842-9051, after 6.

BOAT: '54, 35 ft. Sportsfisherman, 275 hp Crusader f.w.c., fully equip., ask. $6,500. 666-5674.

BOAT: '59, 18 ft. Tompson, '67 Holsclaw trlr., $500. WE 1-5567.

REVELCRAFT: 19 ft., wood, hdtp., all access., no motor, $350. Alan Dreyer, Ext. 3348.

BOAT: 15 ft. Lyman, fbgl. o'wood, rdy. for water, best offer. IV 5-1254.

COUNTRY SQUIRE: '65 Ford, 10 pass., auto., pwr. steer. & bks., ask. $600. 472-2625, after 4 p.m.

at your SERVICE

This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, or national origin.

Type or print ad on form available at Employees Service and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 5, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under $10, no firearms or ammunition.

HONDA: '66, 305cc Dream, new batt., windshld., rebit. transmission, 16,000 mi., ask. $390. AT 9-6984.

HOUSE: Wantagh, '51 Levitt ranch, ext. liv. rm., 3 bdrm., 2 bath, o'sz. gar., xtras, nr. sch., ask. $34,900. PE 5-1250, evgs.

HOUSE: Sands Pt., Waterview, 5 bdrm., liv. rm. w/firepl., den/library, 3 full bath, 2 half bath, lrg. foyer, formal din. rm., lrg. kit. w/firepl., ctl. air cond., 2.4 wood, acres, pvt. bch. rgts., boat moor. area & tennis courts, $185,000. 883-8111.

CAB. CRUISER: 23 ft. Chris Craft, 185 hp, all paint., slps. 3, std.-up, sink, galley. JU 7-2357, after 6 p.m.

TBL.: Wrought iron, 36 in. round opens to 36x60 w/2, 12 in. leaves, wh. formica, $45. OV 1-4424, after 5 p.m.

SEW. MACH.: Bel Air, elec., port., no attach., ask. $25. 433-8250.

MISC.: 19 in. Toro rotary mower w/grass catch., $75; port. Roto-broil oven/rotisseries, $35; Mixmaster w/juicer, $25; port. elec. roaster, $10; ¼ in. elec. drill, car. spd., $15. A. McLean, Ext. 2132.

FISH TANK: 10 gal., std. & all access., pump, filt., heat., $25. CH 9-5758, after 5 p.m.

PUPPY: Dachshund, AKC papers, fem., 9 mo., blk. & tan, mini., all shots, worm., trained. AN 6-2831.

PUPPIES: Labrador retriever, 2 fem., 8 wk., champ. lines, $125-$150. 669-0549.

PEKINESE: 2 yr. male, ped., w/papers, $25. 665-6907.

PUPPIES: 2 fem. Chihuahua. tan/wh., no papers, $30/ea. 289-2738.

GIFT CERT.: Bowl. ball, ask. $20. 681-0243, after 5:30 p.m.

MISC.: Din. rm. furn., round oak ped. antique tbl., ornate base, tiger hd./claws, 44 in., 3 leaves, $170; match. chrs., $10/ea.; china closet, $50. 212 DA 6-2699.

MISC.: 3-spd. lady's bicycle, blk., Royal Scott, used twice, $45; 9 ft. 4 panel gar. dr., $20. 731-3970.

GAME: Elec. pinball, $15. 234-3194.

RADIO STA.: Amateur, Heath HW-16, compact CW transceiver, 50-90 watts, spkr., ant., crystals, $105. 751-1256.

UTIL. TRLR.: '70, all metal Sears, hinged, remov. dome metal tp., fend., lgts., spare tire, safety chain, can carry 1,000 lbs., $200. 587-6621.

BOAT: 13 ft. wood, 10 hp Evinrude, trlr., $150. 549-4332.

SAILFISH: Alcort, $200; Sears Streamliner 5-spd. bike, $50. 666-8967, evgs.

BOAT: 28 ft. Lief Vike cust. sea skiff, f.w.c., 155 hp Nordberg Knight, hd., galley, slps. 4, S/S, depth find., outrig., Monel made gas, f.w. & fish tanks, 250 lb. moor., 12 ft. Jon boat, 4 hp motor, $3,900. HA 3-0298.

BOAT: 12 ft. Sears Gamefisherman, fbgl., 5 hp air cool. Clinton outbd., 6 hr., $300. IV 6-1716, after 5:30 p.m.

BOAT: 26 ft. Gehrlein, all mahog. hull, teak deck, new 327 c.i. V-8, Navy tp., V-bunks, xtras, $1,995; 150cc motorcycle, new eng., tire, & elec. start, Suzuki, $250. MO 9-9316.

MISC.: Scuba div. tanks, dbls., $50; full sz. surfbd., $55; Diatomaceous earth filt., for lrg. pool, $50; 4½ in. reflect. telescope set-up to accept camera, $65. CH 9-6229.

POOL: 4x18, filt., vac., skimmer, $75; 27,000 BTU air cond., 220 volts! 8 position thermo., 3-spd. fan; also 3-spd. vent. fan, $300. 735-5761.

POOL FILT.: Cartridge, Coleco-Aqua-matic #110, deluxe auto. skimmer by Skimmaster, used 1 season, $15. 666-6138.

OLDSMOBILE: '68 Cutlass Supreme, wh., 4-dr. hdtp., radio, pwr. steer., $1,200. 928-1879, after 6 p.m.

SIMCA: '68, new batt. & bks., 4-yr., wh. w/red int., AM/FM, $695. 864-8163, after 5 p.m.

FORD: '64 Fairlane wag., 6 cyl., R&H, auto., orig. owner, 75,000 mi., xtras, $395. 421-2240.

OPEL: '72, 1900, sport coupe, $2,000. 669-8958.

SEDAN DE VILLE: '64, fully load., gray w/blk. vinyl tp., $450. MO 6-6482.

VW: '71 bus, new eng., & carb., AM/FM, snows, $2,500. 586-8183.

PONTIAC: '68 Firebird, 375 hp, hdrs., new H70 tires, new exh. sys., ask. $1,650. 751-1706.

TORINO: '69 Ford, air cond., vinyl roof, pwr. steer., 302 c.i., 33,000 mi., $1,700. 928-3976.

CHEVROLET: '66 Nova SS, Nassau blue, 327-350, hvy. dty. zoom flywhl., pressure plate & clutch, Hurst link. & compet. gearbox, Eden posi w/3.73 zoom gears/opt. 4.56, Cragar mags, Lakewood traction, Panasonic tape deck & spkrs., ask. $1,700. WE 1-5563.

MUSTANG: '67 conv., 6 cyl., auto., pwr. tp., $495. LT 9-6588.

PORSCHE: '72 type 914, $3,600. AN 1-5680.

JEEPSTER: '70, 4 whl. drive, Warn hubs, roof rack, rear seat, Meyer snowplow, 7,000 mi., $2,400. GU 5-7488.

TRUCK: '66 Internat'l. step van, Metro 1200, $750. IV 5-3041.

MOTORCYCLE: '70 Yamaha, 250cc twin, red, new hi-bars, batt. & clutch, 2 helmets, inner tube lock & chain, $450. 334-6968.

MINI BIKE: '71 Stellar, 3 hp, Tecumseh compact, $95. WE 1-8700, after 4 p.m.

MISC.: Baby crib; 5 dwr. dress. set, wal. w/cane trim, $50. 293-8343.

POOL: 15x4, filt. & ladder, $100. 212 639-2034.

BRIDAL GOWN: Sz. 9, silk organza w/alencon lace bodice & sleeves, self train, comp. w/hoop underskirt, $35. 212 OR 1-8556.

For Sale

TURNTBL.: Garrard, mod. RC88, w/mag. cart., diamond stylus, level, & base, $100. LI 1-8590.

HI-RISER: $30. HA 7-9142.

EQUIP.: Microphone Shure mod. 55SW, Unidyne incl. cable & Atlas std.; Microphone mixer, Claricon 4 channel, 44-460, $30. W. Kummer, Ext. 84786.

TRAVEL TRLR.: '69 Tag-a-long, 14 ft., self cont., slps. 6, xtras, $1,250. 281-8063.

ENG.: '65 VW, 40 hp, comp. rebit. & install., $165. 273-6239.

AUTO. PARTS: From '65 Plymouth V-8, Chrys., Dodge, Ply. V-8(Chevy pwr. glide trans., '69 Pontiac, hds., cam., etc. 347-6516, after 9 p.m

MISC.: 5, 600x13 Goodrich w/w tires, 5,500 mi., no flats, $11/ea., $50/set; 4, 155SR13 wide oval tires, $20; Sprite/MG Midget parts, wire whl. axels, shocks, polut. ctl. sys., bumpers; ping pong tbl., $15; lrg. radiator cov., $10/2; radio ctl. car mod., $10. PY 8-4258.

FLYWHLS.: Chevy Schiefer, new, 30 lb. teel & 12 lb. alum., $35/ea. JU 5-8992.

MISC.: VW hdlgt. & bracket; sgl. lgt.; shop manual; roof rack; cables, etc., best offer. 277-9568.

SAILBOAT: 19 ft. Rhodes, mold. plywood, keel, 2 suits sails, in water, fam. day sail., $1,250. OR 1-5788.

BOAT: 16½ ft. lapstrake w/Evinrude twin 40, Holsclaw trlr., anchor, life jack., gas tank, ask. $700. 724-5389, after 6 p.m.

HOUSE: Flushing, Queens, 2 fam., 6 rm. & bath ea. fl., brass plumb., nr. all transport., 50x163, gd. income, $52,000. 922-6656.

HOUSE: Plainview, Wash. Ave. vic., 3 bdrm. poss 4, ctr. hall. hilltp. ranch, 2 bath, liv. rm. w/firepl., formal din. rm., lrg. eat-in-kit., panel. den, mud/lndry rm., 2-½ gar., patio, all appli., carpet., fenc. ¼ acre, xtras, $57,000. 692-2738.

HOUSE: Oakdale, 5 bdrm. hi-ranch, 1½ bath, fam. rm., din. rm., eat-in-kit., patio, s-s, w-w, att. gar., 5 appli., lrg. plot, $1,050 tax, $33,990. 589-5229.

HOUSE: S. Huntington, 5 bdrm. col., 1,000 sq. ft., patio, firepl., bsmt., 10 rm., 1½-2½ bath, ¼ acre wood., mi. Walt Whitman Mall, $47,500. 549-4332.

HOUSE: Wading River, furn., 3 bdrm. col., panel. down., firepl., patio, 2 car gar., almost an acre in fruit orchard, 600 ft. from pvt. bch., deed. bch. rgts., $37,500. 929-6291.

HOUSE: Ronkonkoma, 2½ yr., 3 bdrm. hi-ranch, lrg. panel. fam. rm., 2 car gar., outdr. din. terrace, eat-in-kit., s-s, xtras, $29,500. 588-4126.

PROPERTY: Albuquerque, N. Mex, reason. 724-0171.

SAILBOAT: Grumman alum., combo, 13x6x59 beam, dacron sail, 14 ft. Cox trlr., $425. AN 5-5118.

HOUSE: West Hempstead, leg. 2 fam., 3 rm. over 5, fin. bsmt., 1 dbl., 1 sgl. gar., alum. sid., 90x119, $45,000. IV 3-2785.

HOUSE: 8 rm. cape, 2 bath, 3 lrg. bdrm., fin. bsmt., att. gar., xtras, hi $40s. OV 1-1837, after 4 p.m.

HOUSE: 3 bdrm. cust. ranch, liv. rm. w/firepl. & beam, ceil., din. rm., lndry., eat-in-kit., encl. porch, 1½ gar., full bsmt., fenc. bkyd., all appli., carpet., $36,000 589-3182

DIN. RM.: Honey mahog., din. tbl. w/leaf, 6 chrs., china, buffet, pads., $125. 825-1568, after 4:30 p.m.

MONZA: '66, wh., 50,500 mi., 4-spd., red & blk. int., $300. HA 1-1169.

MAVERICK: '70, red, blk. int., new tires, R&H, $1,200. 889-3863.

TENT: 9.7x9.7 umbrella, Morsan, carry bags, poles, stakes, used 4 summers, $40. WE 1-7331.

DUNE BUGGY: '70 Bandito, cust. int., chrome mags, Goodyear rubber, 10 in. rear, $1,700. 433-0282.

CAMPER: '70 VW, fully equip., pop-tp. chem. hd., sink, icebox, step, etc., $2,800. 277-4025.

DINGHY: 6 ft., 3 ft. beam, oars, oarlocks, $75. 585-2983.

BOAT: 20 ft. fbgl. Correct craft, 235 hp inbd. w/full canv., trlr., 5,000 lb. elec. winch, HA 7-2525, after 6 p.m.

FLY. FINN: 21 ft., 100 hp hp Evinrude, equip. incl. 30 gal. gas tank. 941-9356.

TRLR.: 21 ft. slps. 8, comp. self cont., range, oven, refrig., batt. w/charger, compressor, scrn. rm., tandem whls., elec. bks., Reese hitch & sway bars, awn., transmision oil cool., K/H pneumatic bk., ask. $2,500. 751-0279.

TV: 23 in. RCA, Early Amer. cons., $65. 286-1057, after 6 p.m.

CAR RADIO: New Delco pushbtn, AM, $35. AN 5-5051.

MISC.: Stroller; bassinet; 2 tricycles; hedge trimmer. 587-0330.

For Sale

LAWNMOWER: 20 in. Toro reel, pwr. handle, trimmer & edger, self-prop., hvy. dty., $75. 265-9422, bet. 9-12 p.m.

HOUSE: 3 bdrm., brick & stone ranch, lrg. din. rm., s-s, appli., sol. plaster walls, 2 car gar., full bsmt., 100x100, rear fenc., w-w, o.h.w. basebd. heat, fully landscpd., city water, 2 wells & pumps, $46,700. TU 8-3117.

HOUSE: E. Northport, 4 bdrm. rustic col. hi-ranch, 2½ bath, panel. fam. rm., liv. rm. w/fieldstone firepl. & handhewn exp. beams, eat-in-kit., din. rm., w-w, ctl. air, 2 car gar., $52,900. 261-5161.

HOUSE: 5 bdrm. exec. col., 4 bath, formal din. & liv. rms., panel. fam. rm., w-w, firepl., brick patio w/redwood tp., firepl., mod. kit. & din. area, fin. bsmt., dbl. gar., stor., 5 air cond., fully lndscpd., $55,000. 265-3990.

HOUSE: N. Babylon, 2 fam., 3 bdrm., liv. rm./kit. comb. up, 3 bdrm., kit., liv. rm., bath down, fenc. 75x100. 587-3887.

HOUSE: Hicksville-Plainview area, 3 lrg. bdrm. corner split, 1½ bath, 2 lrg. dens, stone firepl., lndry., gl. dr. from din. rm. to flagstone terr., heat, sunken pool, ask. $50,000. WE 5-8793, after 5 p.m.

HOUSE: 3 bdrm. col. cape, off LIE serv. rd., Ronkonkoma, 2 bath, eat-in-kit., din. rm., panel, den, full bsmt., fenc. yd., o.h.w., s-s, $26,500. 585-0814.

HOUSE: Huntington, 3 bdrm. ranch, Elwood sch. dist., o.h.w. heat, fenc., conven. to shop & pkwys., $36,600. 261-0478, after 5 p.m.

HOUSE: 4 bdrm. Levitt cape, enlrg. kit., fully equip., cedar shake front, 2 bay wind., patio, new cesspool, fenc. yd., new roof, tiled bath, att. gar., nr. Grumman, $31,900. PY 6-2448.

FALCON: '64, auto., R&H, new bks. & start., $150; also stereo, Norelco Contin. 4 trk. tape record., 7 in. reel, 65 w., PA & multiplay port. w/std., mike, $175. George McGrath, Ext. 1572.

DODGE: '67 Polara, V-8, auto. XM, air cond., R&H, pwr. steer., 4 new gl. belt tires, $1,100. 735-9864, after 5:30 p.m.

DODGE: '69 Charger, blue w/blk. vinyl roof, 383, 4-spd. Hurst shift, nw tires, fact. tape deck, lo mi., $1,595. 567-0797.

PONTIAC: '68 Bonneville, conv., 19,000 mi., $1,500. 223-0516.

FORD: '65 van, ½ ton, $450. 212 YE 2-3664.

FORD: '64 Country sed., 9 pass., pwr. steer., radio, elec. rear wind., auto., 351 4 V eng., $295. JU 7-0830.

OPEL KADETT: '68, 42,000 mi., new bks. & muff., snows, 30+ mpg, $700. 785-4637.

CORVAIR: '65, 4-dr. hdtp., auto., R&H, nds. some mech. work. 589-8171.

DATSUN: '69, 1600 mod. conv., 20,000 mi., just tuned, ask. $1,675. MY 4-1069.

MERCURY: '70 Cyclone GT pwr. steer. & disc bks., FM, rear spkrs., bkt. seats, auto. fl. shift, $2,100. PE 5-6213, after 6 p.m.

STA. WAG.: '66 Chevy, 9 pass., $1,000. 731-6936.

MAZDA: '71, R100, Wankel eng., 2-dr., 4-spd., full instru., radial tires, sty. o'sz whls., reclin. bkts., radio & pwr. ant., 12,000 mi., $2,500. David Rothschild, Ext. 1670.

AUSTIN HEALY: '64 Sprite, sport car, $400. 475-8494, after 5 p.m.

For Sale

MG: '70 Midget, best offer. WE 5-3334, after 5 p.m.

VW: '68 Fastback, sun roof, AM/FM, w/w, 2 new tires, red w/blk. int., 2 maint. man., $1,200. 549-4063.

VW: '66 Bug, new eng., snows on xtra rims, $600. AT 9-0992.

CHEVY: '67 SS, V-8, 2-dr. hdtp., pwr. steer. & bks., R&H, $800. LI 1-4325.

BOAT: 25 ft. Sportsfisherman, '60 Ulrichsen flybridge, pole hold., fish well, cush., hd., 125 hp Chrysler Crown, 3 yr., low hrs., xtras, $2,100. 587-3877.

BOAT: 20 ft. Owens, 8 ft. beam, Navy tp., '66, 90 hp Evinrude, elec. start., elec. shift, '69 Shipmate tandem trlr., xtras. WE 1-6099.

SLOOP: Seafarer 31, fbgl., dinette, roller furling Genoa, 2 main sails, work. jib, outbd. in Instatilt well. 427-8615.

SAILBOAT: 22 ft. Star Class 1367, 2 sets sails, trlr., comp. hardware, ask. $450. 473-3854.

BOAT: 18 ft. Holiday, 100 hp Evinrude, fully equip., $750. WE 1-7425.

BOAT: '66 Stik Craft, 20 ft. DP "V" gl. hull, overdrive, gas tank, 318 c.i. Buick eng., used 1 season, stor. in marina. 979-0834.

BOAT: '69 Eltro, 17½ ft. fbgl. runabout, 85 hp Johnson, Cox trlr., 2,000 lb. cap., $2,600. 589-7836.

POOL: 12x4 ft. Coleco, vinyl liner, filt., ladder, cov., ft. bath, used 1 yr., xtras, best offer. 864-2226, after 6 p.m.

MISC.: 12x4 ft. pool w/access., $100; refrig./freezer, $50; air cond., $25; '57 Cadillac, new eng., part. restored, best offer. LO 1-6640, after 5:30 pm.

PUPPIES: Basset hound, AKC, red & wh. Angelo Stefantos, Ext. 3658.

PUPPIES: Germ. shep., show stock, parents X-ray. normal hips, $75. 473-8980.

BOSTON TERR.: Male, AKC, 8 mo., all shots, exc. mark., reason. 433-2668.

SIBERIAN HUSKY: Blk. & wh., blue eyed, 6 mo., AKC, $200. 333-1871.

SIBERIAN HUSKY: Male, 6 mo., AKC reg., all wh./split eye, all shots, $150. 234-4424.

BOAT: 35 ft. Sportsfisherman, 275 hp, FWC Crusader, fully equip., $5,900. 666-5674.

SAILBOAT: 14 ft. Gruman alum., dacron sail, Cox trlr., $425, will sell sep. 265-5118.

BOAT: 18 ft. fbgl., Winner, slps. 2, sink, hd., 90 hp Evinrude, Cox trlr., xtras, rdy. to go, $1,850. 732-4483.

AUSTIN AMEAR.: '68, auto., 42,000 mi., $525. 921-3823.

FORD: '68 sed., 35,000 mi., $995; '62 Ford sta. wag., 95. PY 8-67566.

MISC.: Frederick Willys pool tbl., 8 ft., $75; elec. guit. & amp., $100; 8 ft. couch, 2 end tbls. & coffee tbl., $25. 691-4165.

HOUSE: Patchogue Vill., 3 bdrm., din. rm., eat-in-kit., fin. bsmt., lrg. attic, 2 sun porches, all appli., pool, gar., bath house, 1½ bath, o.h.w., xtras, $27,000. GR 5-5211.

HOUSE: Bethpage, 3 bdrm., formal din. rm., firepl., elec. kit., Fla. rm., 2 car gar., lrg. exp. attic, bsmt., ½ acre, $44,000. 935-9417.

For Sale

HOUSE: Islip Vill., 3 bdrm. ranch, treed ½ acre, Bayberry Pt., S. of Montauk Hwy., appli., mod. kit., lrg. liv. rm., din. area, den w/firepl., lrg. playrm., pan., cath. ceil, deck, 2 full bath, lndscpd., $45,000. 581-0333.

HOUSE: Pt. Jeff Vill., 4 bdrm. col. cape, wood, lot, low tax, make offer. 473-6428.

HOUSE: Farmingdale, 3 bdrm. split, din. rm., eat-in-kit., panel. rec. rm., fin. bsmt. w/bar, lndry., 1½ bath, w-w, in-grnd. pool, gunite, xtras, $39,990. CH 9-6817.

HOUSE: Commack, 3 bdrm., din. rm., eat-in-kit., s-s, gar., fenc. ¼ acre, fin. bsmt. w/poss. 4th bdrm., carpet. & appli., nr. pkwys., xtras, ask. $33,990, 5¼% mtge. take-over avail. 543-4116.

BUNGALOW: Ferndale bet. Swan Lake & Grossingers, 2 bdrm., bath, scrn. porch, furn., gas hot water, town water/sewer, 110-220v, 40x100, pvt. lake, $13,000. PY 6-3887, after 5:30 p.m.

PROPERTY: Mackie Bros. estate sect. of Citrus Spgs. dev., S. of Ocala, Fla., corner plot, over ½ acre, take o'pmts. 666-5057, after 6 p.m.

PROPERTY: Clinton County, N.Y., 189, hrd. surf. rd. front, wood., ½ mi. s. of Churubusco, $4,300. 732-5954, after 6 p.m.

MINI BIKE: '71, $80. CH 9-6229.

BICYCLE: 20 in. boy's Royce Union Sting-Ray, $20. HR 2-1568.

BAND EQUIP.: Vox Super-Beatle amp., suit. guitar, bass guitar, or organ; 240w peak, 3 channels, 6 inputs, spec. effects, 4, 12 in. spkrs., 2, 4 in. Horn driver, ask. $400. 735-5957.

PHOTO EQUIP.: Vivitar super 8, EE, 4:1 zoom, motor drive, 3-spd., new, w/guar., $60; super 8 Bauer Mini & Kodak M26, EE motor drive, new w/guar., $35 ea.; Bell & Howell dual 8 proj., zoom, other features, new w/guar., $135. IV 1-6247.

COT: Canvas fol. camp type. MY 4-7890.

MISC.: Blk. Persian lamb coat, sz. 18, $150; full sz. violin, case, 2 bows, access., $80. MY 4-5091, after 5 p.m.

VEND. MACH.: 10 candy, potent. $100/wk. route. 681-9588, after 5 p.m.

WATER SKIS: Jr. sz., 5 ft. lg., $10. 212 225-5752.

DIA. RING: $100. Donna Carr, Ext. 9831.

GOLF CLUBS: Comp. set, lady's Wilson W, cart & access., $100; child's start. set. w/bag, $10. 922-9338, ngts.

POLAROID: Colorpack II & camera case, $22. 589-4947.

MISC.: Blond chifferobe, $18; dress. tbl., $10; hobby horse, $15. 735-5261.

MISC.: Auto. wind. fan, therm., fits dbl. hung, $25; '46, 4-whl. drive Jeep, full cab., dbl. hitch, $275; antique grind. whl., $45. 796-5872.

DOLLS: Assort., antique, china, bisque, etc. HA 7-7073.

MISC.: Stereo AM/FM cons., 4-spkrs., contemp. wal. cab., $90; rollaway bd., steel frame, sgl. bd., box spg. & matt., best offer. 265-7446, after 3 p.m.

STEREO: Port., Motorola, ask. $50. 767-0792.

BEAGLE: AKC, male, 1 yr., train., loves child., $50. 433-7524.

BICYCLE: Boy's or girl's, 20 in. Columbia, $15. J. Drvostep, Ext. 7134.

CYL. HDS.: Rebit. for '64-'68 Cadillac, $85. 922-9338, ngts.

VW: '61, '64 rebit. eng., new bks., clutch, muff., heat. box., gen., volt. reg., nds. 1st gear, $150. 585-5426.

AMPEG: Gemini I, 2 channels, reverb, trem., casters & cov., ask. $95. 587-4413.

CAMARO: '70, forest grn., sandalwood int., 350 c.i., 250 hp, 4-spd., AM/FM w/rear spkr., poly tires w/rear spkr., poly tires w/rally whls., pwr. disc bks., 15,000 mi., 18 mpg, $2,400. 822-6892.

FORD: '67, ½ ton, 4-whl. drive, snowplow, V-8, 4-spd., lock. hubs. 543-1767.

PLYMOUTH: '67 Belvedere II, wh., 4-dr. sed., AM/FM, bd. platform, pwr. bks. Mark Fortune, Ext. 2536.

FORD: '64 Galaxie conv., 500XL, pwr. steer., R&H, rear gl. wind., V-8, auto., red w/blk. int., $400. 354-8832.

FORD: '66 cust. 500, 4-dr., auto., pwr. steer., 289 c.i., 2 cleat. snows, $450. 724-5460.

NOVA: '68 SS, 350, 2-dr., blue w/blk. vinyl roof, bkt. seats, cons., 3-spd., low mi., orig. owner, $1,200. MO 9-7513.

TRUCK: '66 Internat'l. step van, Metro 1200, $750. IV 5-3041.

CAMPER: Coachman, ref., stove, heat. w/therm., intercom., bath. w/add. vanity, slid. dr. for upper bunk, $1,500. truck avail. 269-6470.

For Sale

HDRS.: & 4-bbl. manifold for 199 or 232 c.i., 6, Amer. motor eng., Vipar & Clifford, $125. Ray Kirchner, Ext. 1752.

MOTORCYCLE: '70 Yamaha, 250cc, red, rd. & dirt bike, 1,500 mi., orig. owner, helmt, $475. EM 3-6708.

MOTORCYCLE: '71 Honda, 175cc, xtras, helmet, $475. 931-6267, after 5 p.m.

TRAIL CYCLE: '72 Chiorda mini, 80cc, 4-spd., gear box, used 2 wks., $200. 475-8494, after 5 p.m.

FURN.: Sol. cherry cocktail tbl., 21x56 w/dwr., $45; sol. maple bdrm. chest, $50. FO 8-1182.

MISC.: House, West Islip, leg. mother/daughter duplex, 75x200, low tax., all fenc., xtras, low $40s; Schwinn adult trike, ask. $100. MO 1-0457, after 6 p.m.

FURN.: French prov. liv. rm. set. 587-4429.

MISC.: Maple dinette set, $30; youth bd. & new matt., $25; crib, $30; 3 mod. sofas; 2 Danish mod. end tbls. & round coffee tbl., $30; woman's roller skates, sz. 8, redwood picnic tbl. & bench; 2 round redwood tbls.; lrg. hobby horse; Wonda chr.; interchange. carr.-stroller-car-seat-rocker-cradle-bassinet; more. 265-3990.

FURN.: Blk. vinyl den set, couch, 2 lounge chrs., lmp, tbl., $200; lrg. shelf unit, adj., $40; bridge tbl. & 4 chrs., $25; 2 air cond., 8,000 BTU, $35/ea. 589-8171.

MISC.: 5 pc. chrome kit. set; Sears Homart 4-spd. wind. fan; 3 sma. bk. cases; new hand slic. mach.; 2 grocery cab.; 35 mm Mimia camera, more. CH 9-1023.

REFRIG.: 14 cu. ft. Frigidaire, self defrost., mini freezer, wh., $70. HT 4-2253.

BREAKFAST NOOK: 7x4 ft. L shaped, bench, tbl., & 2 chrs., pad., wrought iron legs, ask. $125. CH 9-6232.

TV: 23 in. B&W Admiral cons., $55. MA 6-2825.

TV: 23 in. color, col. cons., dds. hi-volt. rectifier, $120. 735-5261.

CASTRO: Conv. cocktail tbl., wal. & wh. formica, opens to accom. 8 or more, $75. 727-9089.

FURN: King sz. col. hdbd., sol. maple, $35; col. corner hutch, pine, $70. 822-1088.

MISC.: 18x12 ft. beige rug w/pad., $45; jalousie door, 81x37, $20. MY 4-4529.

FURN.: From 5 rm. apt., hi-fi., TV, air cond., stereo, washer, etc., reason. 212 327-3946 after 5 p.m.

FURN.: 4 pc. contemp. sect. sofa, beige woven patt., $150. 285-5252.

WASH. MACH.: 2-spd. Whirlpool, 3 cyc., top load., used 6 mo., $85. Fred. Rogers, Ext. 2436.

MISC.: Childcraft crib w/matt., $35; Tony hobby horse; RCA Radio Phono, 45 rpm, $10. OV 1-7891.

CARR.: Biltrite coach, non-stain matt., tan & wh., $45. 585-7760.

MISC.: Huffy snowplow att.; trlr. hitch; spreader, sweeper; child. ski boots & clothes; bags of lime, etc., best offer. HA 1-4973.

BICYCLES: Boy's Sting-Ray, banana seat, sissy bar, 20 in.; 3-spd. Sting-Ray, 20 in., banana seat, sissy bar. OV 1-7381.

LAWNMOWER: 2 cyc. Jacobsen reel, Lady Queen, recent. sharp. & o'haul. MY 4-6053.

PICKUP: '60 Ford F100, ask. $250. 585-1402.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

ROGER L. FRANCIS of Drafting, Plant 34 died June 26 at the age of 49. He lived at 18 Smith St., Ronkonkoma and had been with Grumman for seven years.

JOSEPH G. NOWAK of Measurement Standards Technology, Plant 12, died July 2 at the age of 37. He had been with the Company since 1967, and he lived at 17 Lansing Ave., East Northport.

JOSEPH J. BOWMAN died July 3 at the age of 60. He worked in Prototype, Plant 1, and he lived at 32 Plymouth St., West Babylon. He had been with Grumman 20 years.

DONALD E. REID of Materials, Plant 55, Savannah, died July 5. He was 50 years old and had been with the Company seven years. His home was at 12506 Sunny Brook Rd., Savannah.

ERNEST G. LE MAY JR. died July 6. He worked in Fluid Power, Plant 35, and lived at 367 Bread and Cheese Hollow Rd., Northport. He was 52 years old, and he had been with Grumman since 1965.

JOSEPH MEDICA of Parts Paint, Plant 3, died July 6 at the age of 63. He had been with the Company 20 years. His home was at 250 Westchester Ave., Babylon.

PETER A. WALTERS died July 9 at the age of 64. He worked in Transportation, Plant 20, and had been with Grumman 21 years. He lived at 15 White Pine La., Northport.

plane GRUMMAN news

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Hey, everybody, better get ready . . . picnic time Saturday

July 22 is right next door in the time march, and if you and the kids want the fun-and-relaxing time of your life, well, that's the day that you should be at the Company's spacious picnic site in Calverton.

The gates will swing open at 8 a.m. The closing time is 4:30 p.m.

The picnic is for everyone in the Grumman family. There are some, for example, whose greatest pleasure is simply to see and feel the spontaneous glow of small children at play.

Whatever the bulb that lights one up at picnic time, it does shine with a special brilliance; and that's all that counts, really. And it's so easy! If you haven't bought your ticket — it costs only $2 (and nothing for family members under the age of 12)—do it now at any Employee Services Office. **No tickets will be sold at the gate,** so go to ESO before it slips your mind. All Grumman employees and their families living under the same roof are eligible, including single employees (who may bring along a girfriend or boyfriend).

Old-timers (anyone who's been at the picnic before) can give you a notion of how best to prepare. Although the Company provides soda, ice cream, hot dogs, and beer—free!—there are items you may want to bring along for your own convenience. You may want to take along lawn chairs (though there are picnic tables at the site); pitchers (for the suds, you know!); grilles on which to cook your steak or hamburger or pheasant under glass; cooking utensils and assorted condiments; charcoal "bricks" for keeping the cooking cooking; blankets; plastic tablecloths; bats, balls, gloves, and like sporting equipment; and—well, you name it.

Program

8 a.m.	Gates open
10 a.m.	Flag raising ceremony
10:30 a.m. - 2 p.m.	Sporting events
10:30 a.m.-12:45 p.m.	Dance music
1 p.m.	Entertainment for children
2 p.m.	Boxing bouts
2:15 - 4:45 p.m.	Dance music
2:30 - 4 p.m.	Awarding of door prizes
4:45 p.m.	Closing flag ceremony

Once you've gathered what you think you'll need for outdoor life, crammed it into your car or station wagon, and set it all out where you want it under the friendly trees of the picnic area, you're just beginning. There are things other than hotdogs and beer and soda and ice cream. There's "Totsville", for example, where kids up to about seven years of age can live it up in grand style. There you'll find a Ferris wheel, a small carousel, swings, two boat rides, a fire engine, and two trains: the "Long Island Rail Road Train," used during the recent World's Fair, and the Calverton Express. (On occasion, says Gus D'Errico of ESO, some children have had "fun" by putting stones on the railroad tracks — something that could derail the trains and cause injury to the kids. This time, for safety's sake, no more stones please.)

New ride this year

As always, there's an attempt to do something a little different each year. This time around it's a new vehicle dubbed The Caterpillar, a marvelous machine that provides a 50-mile-per-hour ride. Not only does it whizz along like that but there's an added thrill: part of that ride takes place in darkness! You may want to saunter by just to hear the kids' reaction.

Then, too, there'll be circus time beginning at 1 p.m., when the kids can gather around to see professional performances, such as jugglers, and clowns. Immediately after, at about 2 p.m., there'll come the "everybody wins" boxing bouts for the small fry. John Koloski and his group will manage that affair, in which each contestant will win a prize.

Throughout most of the day, Al Kordula's musicians will be entertaining with a great variety of sounds—music for background, music for dancing, music for rock-'n'-roll. As always, the energetic ones will have a chance at a few polkas, too.

Out in the open area, there may be a ballgame or two . . . some kite-flying . . . some pitch and catch . . . some runnin' around just for the heck of it . . . or even some sunbathing. . . .

At every picnic, too, are what might be called handicap races, such as a potato sack race, a three legged race, and a wheelbarrow race. There are also legitimate races, such as the 50-yard dash for girls and one for boys; and a softball throwing contest for gals only; and a husband-wife egg throwing contest.

Oh! Let's not forget prizes! That's right. Just hang on to the ticket stub you'll get because, between 2:30 and 4 p.m., there'll be drawings for prizes. So listen to the P.A. system. More than 100 prizes—the top one being a choice of a TV set, air conditioner, or freezer—will be awarded. Hang on to your stub should you leave early; you'll need it to collect your prize should you win.

Just in case . . .

In the unlikely event of rain on Picnic Day, the outing will be held on Sunday, July 23.

Any postponement will be announced early on Saturday over the following Long Island radio stations:

WLIR, Garden City (FM 92.7); WGBB, Freeport (AM 1240); WHLI, Hempstead (AM 1100); WBAB, Babylon (AM 1440, FM 102.3); WALK Patchogue (AM 1370, FM-97.5); WGSM, Huntington (AM-740); WLNG, Sag Harbor (AM-1600).

A quick check may also be made by telephone. Information will be available by calling PA 7-1500 for the Calverton area or LR 5-5111.

All you have to do now is get a $2 ticket that allows you to get away for a while. The day can be as active or as restful as you want. It is your day. Make the most of it.

All roads pointing toward Calverton